The New York Medical Times.

VOL. XIII. NEW YORK, NOVEMBER, 1885. No. 8.

ORIGINAL ARTICLES.

RATIONAL PHYSIC.*

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"It is the part of rational medicine to require evidence for what it admits and believes."—JACOB BIGELOW, M.D.

IN 1846, the late Sir John Forbes, M.D., F.R.S., of England, in an essay on "Young Physic," first published in the *British and Foreign Medical Review*, arraigned Old Physic at the bar of common sense, and convicted her of maintaining errors of philosophy and practice which were a gross travesty on science. Coming from the Queen's physician, a man distinguished as a scholar and eminent in the profession, the arraignment of Sir John produced a profound sensation throughout the medical world, causing serious defection in the ranks of Old Physic, and adding an impetus to the tide of homœopathy which was then at its flood. Many of you may remember it. It was the initiative of a movement known as Rational Medicine, which was led on this side of the water by two Harvard professors, namely, Drs. Jacob Bigelow and Oliver Wendell Holmes, of Boston. "Young Physic" was an intelligent protest against the false and vicious ideas and methods which had become dominant in the profession of that time; and it embodied an earnest plea for the adoption of more rational conceptions of malady and more rational ideas and methods of preparing and prescribing medicines.

If we were speaking to an old school audience we could not make better use of our time and yours than to reproduce the arguments of Sir John Forbes against the fallacies of modern physic. Many of the fallacies and misconceptions of the profession, of which Sir John complained, are still prevalent, not only in the old school, but in the new. It is true, that some of them have been left behind, and that others have been modified; but enough of them remain to justify a serious arraignment of the schools. For example, the old school has nearly abandoned venesection in certain cases in the treatment of which it was the leading remedy in Sir John's time; and mercury and antimony are less used now than then. But other and equally virulent remedies have taken their places, as, for instance, quinine has taken the place of venesection and antimony in the treatment of pneumonia, and podophyllin has been substituted to some extent for mercury in gastric fever and rheumatism. Not that mercury is nearly obsolete in the practice of to-day, but that it is given in milder courses, while quinine is to-day prescribed in doses which would astonish the natives of a quarter of a century ago. Then, it was said by a follower of Sir John Forbes, (Prof. Gilman) that "a mild mercurial course was like mildly cutting a man's throat." It would be difficult to imagine what would be thought by such a one of giving thirty grain doses of quinine for pneumonia, which is the modern dose among some of our heroic brethren of the old school. We have observed the effect of such a procedure in pneumonia with bewildering reflections. To us the practice seems quite as irrational as that of striking a man on the head with a club for vertigo—and a great deal more perilous.—The "chalk mixture" is still in use for dysentery, with its usual fatality, opium is given for colic, ipecac for croup, the bromides for insomnia, and morphia for almost all the suffering that flesh is heir to, oblivious of indications, and regardless of rational conceptions of the nature and causes of the phenomena known as malady. Polypharmacy still exists, against the evils of which Sir John's essay was especially directed. There may be fewer elements in the prescriptions of to-day than then, "to fight together in the dark," as was said of them by the late Dr. Paris, of England, but they are numerous still, and put up in a form a hundredfold more condensed and subtle. Polypharmacy is "an excrescence on science," said the late Dr. Bigelow; it is a "monstrous system," observed Sir John Forbes. And so it is both. But a much greater evil than this has taken root in old school physic and threatens to take root in new school physic—namely, that of a practice of a class who prepare remedies for the trade. Pharmaceutists have now assumed the rôle of a profession, the function of which is to provide remedies for the practitioner. Elegantly put up on purely empirical formulas accompanied by dosage and clinical indications, are these remedies by men who make no pretense to a knowledge of even the elements of physic. The manufacture and sale of medicines have thus become a traffic, with the result of breeding more quackery in the profession than there is out of it, with the result, also, of adding

* Read before the Medico-Chirurgical Society of New York, [October 13th, 1885.

to the prevalence of chronic maladies. "Nothing has a greater tendency," says Sir John Forbes, "to dissociate practical medicine from science, and to stamp it as *trade*, than this system of pharmaceutical device."* It is an evil of august proportions against which the medical profession should array itself.

The want of definite knowledge of the powers and limitations of medicines has led physicians into many errors of which the above is a sample, and for which new school physicians must bear a full share of the responsibility. Acting on the mistaken assumption that there is a balm for every wound, a similimum for every simile, they have embraced exaggerated notions of the supremacy of medicines over disease and encouraged the public to embrace them. The result is that the *Symptomen Codices* are ransacked for remedies when the indications may be more properly met by other and simpler means. Can anything be more inane than to seek for a similimum in ataxic fevers of which the typhoid is a type? Or the endeavor to find a specific for the colic of over-feeding, or the cachexia of foul air? Or antidotes for the effects of worry, anxiety, grief, unrequited love? These last are the *morbifica psychica* which cause more disease than they are accredited with. To prescribe specifics under such and similar circumstances is misleading. It is worse than that. The practice is unscientific. We maintain that he who prescribes medicine idly, that is, out of place, or without due regard to its fitness, or prescribes it when sanitation is indicated and not medicine, perpetrates a fraud on innocent credulity, and if he does so consciously, places himself on the plane of one who makes medicine a traffic. It is a wrong against human nature, for is it not taking advantage of credulity to enrich oneself? It is betraying a trust and is, therefore, an act degrading to the professional character. "The community require to be undeceived and re-educated," says the late Dr. Bigelow, "so far as to know what is true and trustworthy from what is gratuitous, unfounded and fallacious. And the profession themselves will proceed with confidence, self-approval and success in proportion as they shall have informed mankind on these important subjects." ("Exposition of Rational Medicine.") This is high-toned doctrine for an old school professor to promulgate; the new school profession can ill-afford to act upon a lower standard of duty and responsibility. It is clearly incumbent on the profession to act upon the suggestion of Sir John Forbes in this matter, namely, to distinguish between curable and incurable diseases; what diseases are "capable of receiving benefit from medical treatment, and what are not; what treatment is the best, safest, the most agreeable; when it is proper to administer medicine and when to refrain from administering it." —("Young Physic.")

Again, at the time of Dr. Forbes' essay the popular notion of malady was as crude and irrational as was the conception of the nature and scope of remedy. This fact was the cause of grievous complaint by the author of "Young Physic," who insisted that our nosologies were predicated on hypotheses, misleading and fallacious, and declared that the need of the profession was a natural history of disease, rather than a systematic classification of disorders, mostly hypothetical, to the end that "the practitioner may be led less to consider the name of a disease, some one symptom, or some one local affection in a disease, than the disease itself." "No systematic or theoretical classification of diseases or of therapeutic agents, ever yet promulgated," he observed, "is true, or anything like the truth"—than which nothing can be truer. Nevertheless, we go on making discoveries of new "diseases" and new additions to our nosologies, and piling up systematic and exhaustive treatises on Practice, which, apart from the information they contain on collateral subjects, are not worth the paper on which they are written. If they were true or anything like the truth the course of the student and practitioner of medicine would be free from the perils of doubt and fear which now beset it. They need only to commit to memory Reynolds' "System of Medicine" and Allen's "Materia Medica"—in which latter task the gods should be propitious—to become accomplished in the medical art.

It is somewhat anomalous that with our advancement in a knowledge of morbific causes we should still cling to conceptions of disease which are obsolete in advanced thought. It is not too much to say that disease is still regarded as an essence, or a thing that has gained entrance to the organism, and that it is treated by us as an evil genius in possession of said organism, as a something to be combated, suppressed, or exorcised. All our language on the subject of malady points to this conclusion. We say such and such a one is *attacked* by pneumonia; or that he was *attacked* by the cholera, or *stricken down* with typhus, or has suffered an *onset* of rheumatism. The *New York Herald*, recently referred to cholera "as *seeking* the valleys in which to *commit* its ravages." An eminent professor, (Dr. Alonzo Clark) in one of the New York Colleges, declared to his class of Medical Students on one occasion, that "dysentery *marches* up the valleys of our mountainous districts and *attacks* the inhabitants." Dr. Russell, referring to the topographical progress of cholera, in his admirable Health Report of New

* *British and Foreign Medical Review*, 1846.

York City for 1870, makes use of the following metaphorical language, without intending it to be metaphorical, however, in respect of the maraudings of that august monster, cholera.

"Cholera," he says, "from its primitive habitat in India, *assumed* the epidemic character in 1817, and *worked* steadily on through Asia, *broke* over the mountains into Russia, and thence down through Europe to the Mediterranean; and finally *crossing* the Atlantic in 1832, *struck* Canada, and *swept* the continent of America after *travelling* the whole length of the United States from the St. Lawrence to the Gulf in a single year!" One wonders that he was not pursued by some enterprising showman and secured for exhibition! Search where one may in medical literature, past or present, and he will find only stray and apparently incidental indications that the phenomena known as malady have been truly apprehended and given their proper place in medical nomenclature and philosophy.

But, though just conceptions of malady are rare, they do exist, to the honor of the medical mind, be it said. Gaubius, a pupil of the celebrated Boerhaave, placed at the beginning of the latter's handbook of "Universal Pathology," this luminous maxim: "*Morbus est vita præter naturam*"—(Disease is a part of life). And Sydenham, one of the most prominent names among Englishmen of medicine, of the last century, left on record a conception of the nature of disease equally just and lucid: "So far as I am capable of a judgment," he writes, "the dictates of reason are as follows, namely: that a disease, however much its cause may be adverse to the human body, is nothing more than an effort of nature, who strives with might and main to restore the health of the patient by the elimination of morbific matter."—(*Works*, Vol. 1, p. 29). Such thoughts are like gems whose brilliancy is heightened by the surrounding darkness.

Now, the ends of Rational Physic require:

First.—Recognition of the agency of Nature, or the Unconscious, as well as the agency of the Conscious, in what goes on in the organism, both in its normal and in its abnormal states.

Second.—Definite knowledge of malady, its natural history in any given case which is submitted for treatment.

Third.—Definite knowledge of therapeutic agents, including their effects in health and their indications in disease; the limitation of their medicinal powers; in what cases useful, in what cases useless, in what cases injurious. *

* Of this last, the powers and limitations of medicines, it is too early to speak with definiteness. It is too large a subject for the occasion, also, for both of which reasons we have ignored it in this connection, except as it is touched upon by inference.

In respect of the *first* requisite of Rational Physic we observe that the supremacy of the Unconscious powers of the organism is generally recognized over the normal state, but that it is as generally ignored in abnormal states of the organism. We trust Nature to digest our food and to assimilate it; to decarbonize our blood and to circulate it; to perform the organic functions of growth, depuration and repair, as well as the higher functions of thinking, willing and feeling—operations which belong to the domain of the Unconscious, and which Consciousness can neither promote nor prevent, but we are wont to distrust the supremacy of this same power in the cure of disease, or in controlling the abnormal state. The truth is, that Nature is as beneficent in disease as she is in health. No one but a novice will doubt her fidelity to herself. Nature is the divine power within us as well as without us. It is manifest in the budding leaf and blossom of springtime and in the scar and yellow leaf of autumn. It is immanent in the primordial cell and its multiplications, and is displayed in the wonderful transformations of living matter through every form of being and grade of development, normal or abnormal. Nature is the presiding genius of our existence. In her might we live; in obedience to her behests we die. It is Nature, or the Unconscious, that heals our wounds and knits our fractures; purifies with the fires of fever and inflammation our bodies from the *débris* of disorganization and infection; that supervises the operation of our remedies, and corrects the blunders of our prescriptions; that answers the prayer of the ignorant and suffering believer, and responds to the stimulus of Faith and Expectation. Quacks and pretenders have taken advantage of the remedial powers of the Unconscious to make fictitious cures and to enrich themselves. The practice is as rife to-day as it was in the Middle Ages, as shown not only by the numbers of clairvoyants, mesmerists, advocates of Faith Cures and Mind Cures which abound to-day and flourish under the very shadow of the profession, but also in the multitude of nostrums and specifics which are on sale in all the drug shops. That so-called "cures" are effected by these means and agencies cannot be doubted. Cures were also effected—wonderful cures, too—by the Perkins' Tractors, by the Frenchman's silver-coated bread crumbs, and to-day, by raw beef and hot water. *Apropos* of the fictitious silver pills of M. Lisle, the Frenchman referred to, the marvels which he effected by them threw into the shade anything the profession of France could do. He appealed for success with them to the imagination, and the result was such as to lead him to declare that the imagination is "a powerful lever and the most precious remedy in the world." The

significance of these facts should not be lost on the philosophic observer, but should guard him from the error of being misled as to the effects of remedies, or against laying claims to the virtues of medicaments, in large doses or small, which have no existence apart from the laws of the Unconscious. It is to the throne of the Unconscious that our administrations to the sick appeal, whether it be by the agency of high dilutions or low dilutions, by laying on of hands or by invocations and prayers. It is the Unconscious that heals the sick and responds to the suppliant heart. What folly it is, therefore, to intimate a doubt of Nature's fidelity to her trusts in defending our bodies against morbific causes and restoring them to health, as we do when we administer ill-tasting decoctions, or *combat* her indications with doses of any strength or degree of dilution! We use the word "combat" advisedly. While we concede that medicines have important uses in the economy, we insist that the actions of the Unconscious powers of the organism are always beneficent in purpose or intent, and that it is unwise and irrational to *combat* them, the true function of our art being, not to combat, but to aid Nature by such mild, conservative and judicious means as the advanced state of therapeutics affords. To turn the faith of mankind away from boluses, to avert the evils of heroic medication and to teach sufferers to trust more to Nature and less to nostrums is the chief office of homœopathy, according to the late Dr. Jacob Bigelow. "There was, perhaps," he says, "needed a popular delusion to institute the experiment on a sufficiently large scale to show that the sick may recover without troublesome aad severe medication."—("Exposition of Rational Medicine," p. 42). Homœopathy, he alleges, served this humane purpose, in the same way that Sir Kenelm Digby reformed English Surgery by binding up the sword that inflicted the wound and leaving the wound alone for Nature "to heal by the first intention."

As to the *second* requirement of Rational Physic, namely, definite knowledge of the nature of malady, we observe that the popular doctrine that disease is an entity, essence, or a thing foreign to the organism, is irrational, as we have seen; it is also irrational to regard it as an evil, for it is more frequently a good, being often the means of obtaining better bodily conditions. Have you never observed the benefit of a boil, an issue, or a bilious attack? Of a diarrhœa, or a run of fever? It is likewise irrational to relegate disease to the domain of the inscrutable, or to assume that we can know nothing of its nature except by its symptoms, as was taught by Hahnemann.*

* "The *ensemble* of these available signs represents, in its full extent, the disease itself—that is, they constitute the true and only form of it the mind is capable of conceiving."—*Organon of Medicine*, sec. 6.—Hering's Translation.

True it is, that the symptoms of a malady often afford one the most practicable guides in the choice of a remedy, but they are no more the disease itself than is the rustling of foliage the wind, or the record of the thermometer, heat or cold. Moreover, symptoms apart from their causes may be misleading, for opposite conditions are often attended by a similar category of symptoms, and similar conditions by dissimilar symptoms—as nausea from reflex or diastaltic causes, and nausea from disordered stomach or indigestion; diarrhœa from constipation, and diarrhœa from indigestion; fever from sepsis, and fever from miasma; coma from narcosis, and coma from cerebral congestion; the delirium of acute mania and the delirium of typhus, etc., the indications of treatment being widely different.

Happily, what was true in Hahnemann's day in respect of ignorance of the nature of the phenomena known as malady is not true to-day. Studies in the domain of morbific causes, by means of the microscope, together by the advance made by the same means in biology and cell-pathology, have made clear to-day that which seemed inscrutable to the pathologist of half a century ago. Not that the subject of morbific causes and their effects is exhausted. It is true that cases of disease are met with to-day the cause or causes of which are obscure or unknown, and that among known causes it is not always an easy matter to determine the operating one or ones. But we know that every disease must have an ætiology, and that, however obscure such ætiology may be, it is a proper subject of investigation, and that a knowledge of it is indispensable to rational treatment. Without this knowledge, symptoms are as a blind guide. Moreover, so far as the abstract nature of malady is concerned, we know as much about it as we do of the abstract nature of health. In other words, we know as much of pathological pnenomena (some of us a great deal more) as we do of physiological phenomena. If health is the normal activity of living matter, or normal cell-life and normal combinations of cell-life, the phenomena known as malady are the abnormal activity of cell-life and abnormal combinations of cell-life. The predicate of the normal activity of living matter is a proper environment; the predicate of the abnormal or diseased activity of living matter is a faulty or improper environment. The resulting conditions are as natural in one state as in the other. The phenomena of one are physiological; the phenomena of the other are pathological. Given a certain range of conditions, physiological phenomena, says Prof. Huxley, will "remain the same within narrow limits for each kind of living thing. . . Outside the range of these conditions, the normal course of the cycle of

vital phenomena is disturbed; abnormal structure makes its appearance, or the proper character and mutual adjustment of the functions cease to be preserved."* It is just at this point that pathological phenomena begin, namely, when the environment from being normal, becomes abnormal. To this law of vital activity in the evolution of vital states, either healthy or diseased, there can be no exception. It is as applicable to the psychical as to the physical, to the higher as well as to the lower orders of beings, to everything, in fact, within the dominion of the Unconscious.

This we conceive to be the rational or scientific doctrine of the origin and development of chronic and constitutional disorders—of all maladies except such as are due to sporadic or incidental causes—as wounds, poisons, parasites, infection and contagion. The adoption of this view of the nature and origin of malady would revolutionize our nosologies and do away with the vicious practice of treating diseases by name, instead of the disease itself—or the person diseased; do away largely, also, with the evils of over-medication. In all cases of malady we have a person who is ill to be treated, and not merely a disease by which a person is supposed to be attacked. To whatever category or classification the abnormal phenomena or symptoms may point, or on whatever part the affection may be located, the fact remains that a patient is suffering from morbific causes, and that in acute cases, Nature is engaged in eliminating them, or initiating a process to parry or obviate their injurious effects. The precise nature and seat of the abnormal disturbance are matters of investigation, the object of which is to establish its natural history. The rational method of procedure comprehends the aiding of Nature by means best adapted to promote the end desired. What those means and methods may be cannot, in general, be predetermined; they can only be determined in any given instance by a diagnosis which would take into account both its ætiology and its symptomatology, that is, its natural history. As to the use of medicaments, this much may be affirmed that, under a strictly rational and scientific method of therapeutics, they would necessarily play a subsidiary part in all chronic maladies.

As to the *third* category on the list of requirements needed to meet the ends of Rational Physic, namely, definite knowledge of therapeutic agents, our line of argument is foreshadowed in what has gone before. Sir Thomas Watson, in his erudite work on *Practice*, lays down the easy proposition that the end to be sought in therapeutics is "to obviate the tendency to death." Nothing could be more logical than such a maxim if we assume, as Sir John assumed, that disease is a something in possession of the organism the effect of which is to destroy the organism and to produce, therefore, a "tendency to death." The maxim of Dr. Watson is not altogether ill-founded; it is a true and safe maxim to act upon, for example, in serious hemorrhages; exhausting, serous discharges; in shocks and faintings; in malignant diseases—carcinoma, typhus, sepsis, etc., when the powers of the Unconscious are in danger of being suddenly overwhelmed and subverted; but nothing can be more fallacious than such a maxim for general procedures if the premise which we have laid down is true, namely, that the operations of Nature or the Unconscious are always beneficent, even in the abnormal state, and that, therefore, the tendency is to health—life, rather than death. According to this predicate a truer and more scientific maxim in therapeutics is, To assist Nature in her effort to restore health. All the great masters of medical philosophy since Hippocrates have taken this view of the physician's duty; and Hahnemann distinctly enunciated it in his chief work, the "Organon of Medicines." "The physician," he says "is likewise the guardian of health when he knows what are the objects that disturb it, which produce and keep up disease, and can remove them from persons who are in health." The method in therapeutics which this great man formulated, as indicated in *similia similibus curantur*, or prescribing a remedy which acts similarly to the action of Nature, that is to say, in the same direction, also distinctly recognizes the therapeutic maxim which we have laid down, namely, that the duty of the physician is to assist Nature in her efforts to restore health.

In our view, the method which Hahnemann discovered—or if it was not discovered by him, that he formulated and made practicable—to meet this great desideratum in therapeutics, is the most rational, and therefore the most scientific, that mortal man ever promulgated for the benefit of a suffering world. Within its sphere—and its sphere is by no means a narrow one—it is the most mild, rational, and at the same time the most effective, method that has yet been proposed, to enable the physician to aid, and not to harass or complicate the efforts of Nature to restore the sick to health. Outside the sphere of operation of the law of Hahnemann there is a broad domain in which to exercise the physician's art, comprehending methods and measures of dietetics, sanitation, relief of suffering, expedients in emergencies, etc., of which we cannot speak in this place. It will suffice to declare, as our deliberate conviction, that the student of Rational Physic, the liberal-minded practitioner, the physician who loves

* "Biology and the Medical Sciences." Address before the International Medical Congress, London, 1881.

the right and eschews the wrong, the man of any profession or following who hates bigotry and sets a higher value on truth than on a system, must acknowledge his indebtedness to Samuel Hahnemann for his incomparable and humane induction by which something approaching order has been wrought out of the chaos of old school therapeutics, and the means devised of utilizing the materia medica for the benefit of the sick.

While we have to make this concession to the genius of Hahnemann and to the truth and beneficence of the fundamental postulate of homœopathy, we have to characterize as irrational, and, therefore, unscientific, many tenets, and the practice based on them, which, like rank weeds, have attached themselves to the pure grains of truth of homœopathy and caused its slow progress to favor among scientific observers.

The first of these false tenets to which we ask attention, is the hypothesis of dynamization. This hypothesis was first brought forward by Hahnemann, and by the strength of Hahnemann's authority it has been upheld. If the hypothesis is supported by any other authority, or if there is any evidence in its favor, except the uncertain and incompetent evidence of clinical experience, which, if accepted, would prove too much, we know not what it is.

Stated briefly—and to state it is to refute it—the hypothesis is that remedies acquire or have developed in them by the process of succession and trituration, a dynamic or spiritual force of peculiarly penetrating and curative power. "The homœopathic healing art," says Hahnemann, "develops for its purpose the immaterial (dynamic) virtues of medicinal substances." ("Organon of Medicine," Sec. 269). "By a mere effort of the mind," he confesses, "we could never discover this innate and hidden faculty of medicines—this spiritual virtue. . . It is by experience only, and observation of the effects produced by their influence on the general state of the economy, that we can either discover or form to ourselves any clear conception of it." (*Ib.* Sec. 20.) It will suffice to say that Hahnemann was right in asserting that no effort of the mind is able "to discover this innate and hidden faculty of medicines;" nor has the physicist of modern times, with all his means of investigation, been able to discover it, though he is able to measure the thickness of the film of the soap-bubble at his greatest tenuity, count the number of molecules in a given measure of gas, or grain of solid matter, estimate with proximate certainty the size of the ultimate atoms, to demonstrate the laws of their movements and relations, and to perform other marvels in mathematics and physics of equal acuteness. Nevertheless, of the dynamis of homœopathy he has discovered nothing. The grain of truth which the hypothesis possesses may be found by the diligent inquirer in the process of division and trituration of crude molecules of matter, by which the medicinal or other properties they possess are brought out and made available for the uses of the economy. The hypothesis as conceived by Hahnemann must be relegated to the realms of myths and fictions with which the imaginative and unscientific mind loves to amuse itself.

Allied to the hypothesis of dynamis of medicaments is the equally untenable one of infinite divisibility of matter. The latter hypothesis was revived from the ancients and made use of by Hahnemann to justify faith in high potentiation. We need not say that the hypothesis is at variance with the demonstration of physics. Both German and English physicists, notably Loschmidt, Clerk Maxwell and Sir William Thompson, eminent physicists and mathematicians, declare that matter cannot be divided beyond definite limits, and that moreover, the degree of tenuity or divisibility which is possible within the limitations of the ultimate atom, is reached at about the fifteen thousand trillionths dilution, (15,000,000,000,000,000,000,000) for substances capable of the greater tenuity, or possessing the minuter molecular constitution. This degree of division is reached at about the eleventh centesimal dilution of the homœopathic notation. Dilutions above this degree of attenuation cannot therefore possess a single molecule of medicine, for the number of molecules in a minim of liquid extract will have become exhausted at this point. Such as may be curious on this interesting subject we refer to the studies of Dr. Conrad Wesselhœft, of Boston, whose careful and impartial investigations are entitled to the fullest confidence. The conclusion at which he arrives is that, for all crude and insoluble substances the limit of *practicable* divisibility is reached about the third centesimal attenuation; and that for soluble substances, liquid extracts, etc., the limit of divisibility is reached at about the tenth or eleventh centesimal dilution. To those who respect science and the claims of the demonstrable on their conscience and convictions, and would have the "demonstrable presence" of medicine in their prescriptions, the use of attenuations of medicine for therapeutic purposes above these limits must appear unwarrantable and irrational. The use of all such higher dilutions, he must regard as justifiable only in that numerous class of cases of sickness which does not need the agency of a medicament, and which is more quickly and pleasantly relieved or cured through expectancy, or the powers of the Unconscious. In all such maladies the so-called high potencies are as efficacious as—water or other non-perturbing substances. They cannot offend the most delicate sensibility, and afford, moreover, a safe and

pleasant placebo on which the patient may profitably fix his attention during convalescence. He who accepts the conclusions of science in this matter, so far as science is able to conclude at all, must needs conclude that the pathogeneses or provings of medicines diluted above the rational limit of divisibility are unreliable and misleading, and that the pathogeneses of all high potencies are derived either from faulty observation, or belong to the phenomena of Expectancy. In either case, they are records of false conclusions.

It is needless to say that this attitude of skepticism, in respect of cures by high potencies and the provings by high potencies, has been assumed in these latter days by a large part of the new or homœopathic school of medicine. Physicians who represent this part of the school prefer allegiance to science—to the rational, if not to the demonstrable—to allegiance to an hypothesis so long, at least, as the facts in support of such hypothsis may be more rationally explained by a more rational premise. If skepticism has any legitimacy in a physician's calling it should be exercised in behalf of certitude as to his remedies, and their relevancy to the sick. The errors of Hahnemann on these subjects are not as to facts—at least not clinical facts—but as to the interpretation of them. The same is true of his followers. The *post hoc, propter hoc* argument appears evident in all their observation, both as to the curative effects of medicines and their pathogenetic effects. In the provings of medicines, it is a matter of record that whatever effects followed the taking of a dose of medicine by a prover—by himself or by others—were attributed by Hahnemann to the agency of the drug. It is also a matter of record that the provers were not always in a normal condition; that like other men and women, they were subject to indispositions, to abnormal disturbances; that, likewise, some of them suffered from certain chronic ailments; and that when any of such ailments disappeared while proving a drug, the fact was accredited to the effect of the drug. To this class of symptoms, comprising a large part of the materia medica, Hahnemann was accustomed to write the word "Heilwirkung"—curative effect. The same loose, unscientific course was and has been pursued in provings by the high potencies. No sufficient attempt has ever been made by any prover to disconnect the consequent from the subsequent in such provings. Nor have the builders of our materia medica, in observations on either high or low potencies, ever thought it necessary to guard against the deception of Nature, or of being imposed upon or misled by the principle of Expectancy on the part of prover and patient.

We can but marvel that this principle should have been and should now be so completely ignored by honest and faithful provers of drugs and prescribers of drugs. All must recognize the power of this marvellous agent over all that goes on in the living economy, and every physician should avail himself of its agency in treating the sick, not blindly and with unreasonable faith in the remedial virtues of medicines, but rationally and intelligently, with full confidence in the power and fidelity of the Unconscious.

After all, the master was right in his recognition of a spiritual hypothesis. The principle of Dynamis is no myth, but a reality in medicinal actions. Instead of its being in the medicament, however, it is in the organism. The Dynamis of Hahnemann is the Nature of Hippocrates, the Archeus of Van Helmont, the Soul of Stahl, the Instinct of the physiologist, and the Unconscious of Von Hartmann. To this oversight, to this transpositions of cause and sequence—this confounding occasion with cause, a by no means unusual oversight—must be attributed the philosophical errors into which the master fell and into which he has dragged so many of his earnest and faithful followers.

Rational therapeutics requires, therefore, among other things, a revision of the Homœopathic Materia Medica in the light of the science of to-day, by a corps of scientific observers. No man is competent for such a work, or for the proper proving of any drug. It should be done by a committee of men and women acting under the authority of the profession—the whole profession—that the results may be scientifically verified and commended to the confidence of the profession. We are confident that the earlier provings of Hahnemann would bear the light of such a scrutiny; his later provings, we are as confident, would suffer by such a test, as would also those of his enthusiastic followers, both of his day and of ours. Leaders and apostles of medical reform, teachers and exemplars of scientific medicine, cannot afford to have their materia medica impeached. Incertitude in the materia medica is discreditable to the character of the profession; fatal to the claim of science in therapeutics; fatal, especially, to any degree of certitude in applying the formula of *similia similibus curantur*.

Brazilian Treatment of Hiccough.—Dr. Manoel Ramos, of Brazil, in a letter to Dr. Dujardin Beaumetz, recommends as a simple and efficient cure for obstinate hiccough the cooling of the lobe of the ear. This method, he says, is very popular in Brazil. By refrigeration of the ear a considerable lowering of temperature is not meant, but a simple cooling with water or even saliva, that is within the reach of every one. Dr. Ramos writes that he has often successfully tried this method on himself as well as others. In one case of obstinate hiccough for which no apparent cause could be found, after vainly trying all empirical means, and even administering pearls of ether, it was sufficient to wet the lobe of the ear with a little water to instantly stop the troublesome spasm of the diaphragm.

RATIONAL SURGERY.

BY A. VARONA, M.D., BROOKLYN N. Y.

IF it is the part of Rational Medicine to require evidence for what it admits and believes, why then not the part of Rational Surgery likewise?

The emancipation of the professional intellect from the thraldom of dogmatism, especially the dogmatism of the professor and the text-book is a slow and difficult process. There are many methods of practice among surgical men which, by virtue of their common acceptance or by reason of their lofty origin, have come to be regarded as truths, either from slavish deference to authority or from indifference to inquiry into their claims to recognition. This, I claim, is not Rational Surgery.

The brilliant achievements of bold and skilful operators stimulate the rising generation of surgeons to servile and too often to blind imitation.

What if the kidney, or the uterus with all its apendages, be extirpated? What if the pylorus or pieces of intestine be excised? What if the liver and the spleen and the lungs and the heart itself, be made the subject of surgical athletics? Should we rush in and do likewise at the first opportunity without due and exhaustive consideration of every factor in the case? The fact that the patient recovers, even the fact that the supposed disease is cured, is not sufficient guarantee that the procedure was justifiable, rational.

Now pray do not misunderstand me. It is not that I value skilful operating the less, but that I value scientific, rational research the more. It is not that I would deny that we have reason to be proud of the achievements of modern operative surgery, but that I hold that the most important surgical problems of the day are not to be solved with the knife or upon the operating table, but with the microscope and in the laboratory.

The successful ligation of the common carotid and subsequent cure of an aneurism may be a brilliant achievement, but the discovery of the means by which the nutrition of the local living cells shall be so controlled and directed that they shall depart from their disturbed course and resume their natural movements would be a far more desirable one. Which one of us has not been consulted by a woman in the prime of life, in the apogee of her womanhood, suffering from a small, insignificant-looking nodule in one of her breasts? Which one of us who has a sympathetic heart as well as a thinking brain has not trembled for that woman? What is that nodule? Do we know? What may it not be? We inquire of her, we learn nothing save that six months ago it was not there. Now let us bring our reason to bear upon the case.

Six months ago there was nothing there, nothing but the healthy activities of living matter. Then in response to some unknown stimulus, one cell which should have quietly reproduced its like and passed away was aroused into unnatural activity and gave birth to a more abundant, therefore a degraded progeny; this followed in the footsteps of the parent cell, and where a short time ago we had symmetry and perfection, we now have asymmetry and imperfection. Will this stop there, will it go on? If it go on what will be the ultimate development of this supernumerary cell family? Retrogression and local death, with its ultimate general infection and death of the individual.

Can we afford to stand still and witness this without making some attempt at remedying the evil? What can we do? We may with one fell swoop of the scapel remove the offending nodule and perchance prolong life, but have we removed the initial stimulus? Alas, the history of one million reproductions of the dreaded diseases speak but too clearly against us. We operate it is true, but we do it without rational grounds.

Then again, what means the chaos of operative procedures in which we are plunged? Where resides the science of surgery—with Liston or with Humphreys—with Lister or with Tait, with Gamgee or with Markoe? Whose is the correct method or are they all correct, for, according to clinical statistics, their results are all equally brilliant—if so, is it possible that unlike methods produce like results or is it that difference in the environment or the surrounding of each case makes a difference in operative procedures necessary? If so is he a rational surgeon who adopts any one method and excludes all others? Which seems more rational, to modify our operative procedures to the requirements of each case, or to sacrifice these requirements and bring all cases to the level of our operative preferences?

Let us, on the other hand, look upon the achievements of the scientific investigator in this same field of surgery. Researches on surgical tubercular diseases; on the relations between erysipelas and other surgical infectious diseases; on the bacteria of syphilis; the comma bacillus, etc.—researches and discoveries that appeal to our understanding and make us feel that we stand on a field where reason guides our footsteps. This, indeed, is the field of Rational Surgery.

PREVENTIVE AGAINST CONTAGION.—According to a correspondent of *Der Fortschritt*, it was observed during a cholera epidemic, that among the numerous employés in a decorative artist's studio, where large quantities of oil of turpentine are continually evaporated, not a single case of cholera occurred, while there were many victims of the disease in the immediate neighborhood.

PHYSIOLOGICAL DIETETICS.

By Alfred K. Hills.

Seventh Article.

DIET AND DYSPEPSIA.

It is not surprising (says the *Medical Record*) to find that directly antagonistic views to Dr. Flint, as to diet and digestion, are held by Sir Henry Thompson. In nine cases out of ten, according to Sir Henry, in a recent article in the *Nineteenth Century*, dyspepsia is simply the result of a stomach trying to digest what it can't. All that a person needs, then, is to select what agrees with him and he has but little trouble with dyspepsia. In other words, if the chronic dyspeptic will diet himself he can generally live as comfortably as anyone. This is so obviously the correct view that it needs little argument for its support. The modern stomach has become a somewhat fastidious organ. It has, in many cases, to be treated gingerly—we do not speak in an officinal sense. Thousands of men go through life examples each day of some prandial self-abnegation. Every now and then they try to teach the stomach wider and more catholic views, but the viscus is obstinate and the owner is forced back to his Spartan regimen. "For most men," continues Sir Henry, "dyspepsia is the penalty of conformity to the eating habits of the majority, and a want of disposition or of enterprise to undertake the trial of simpler foods than those around them consume probably determines the continuance of their unhappy troubles. I have for some years past been compelled, by facts which are constantly coming before me, to accept the conclusion that more mischief in the form of actual disease, of impaired vigor, and of shortened life, accrues to civilized man, so far as I have observed in our own country and throughout Western and Central Europe, from erroneous habits in eating than from the habitual use of alcoholic drink, considerable as I know the evil of that to be."

There are cases in which the idiosyncrasy of the patient will lead one to curious extremities in the selection of food, for sometimes the craving of the sufferer will indicate the article required, however indigestible it may seem on theoretical grounds, and the result often shows this course to be the best to pursue for positive relief, and even complete cure has been known to follow. We should, however, work in this direction with great caution.

In the preparation of a predigested meat-food, which is oftentimes necessary, the desideratum has been to produce an article containing the largest percentage of peptones in such a form as not to destroy the natural odor of the beef, make it palatable, without the use of correctives, and put it up in such a manner that it will keep without losing its properties or becoming stale or nauseous. According to an analysis made by Dr. Frankl, *Rudisch's Sarco-Peptones* contain a larger amount of albuminous and nutritive principles than is found in any other food, and at the same time it is put up in such a form as to be agreeable to the most fastidious taste.

A great merit of this food is that it can be prepared in a number of ways. It dissolves very readily in boiling water, or it may be added to hot milk. In persons suffering from exhaustion it can be given on toast or stale broad, the patient taking it with a relish, not only for a few times but for weeks in succession.

In a case cited by Tangeman (*Therap. Gaz.*, July, 1884) of aggravated dyspepsia with great irritability of stomach, this preparation was subjected to a comparative test of an unusually conclusive character—the patient beginning with malt extracts, simple and compound "foods" for invalids of different brands, and ending with the various preparations of beef, in juice, extract and powder. The dried bullock's blood was rejected on the same grounds that some other valuable articles had been rejected on, namely, they were not palatable. His attention was called to "Sarco-Peptones," and, like all invalids, he placed all hopes in the article. He commenced using it exclusively, nearly always dissolved in hot water, making a kind of broth. "Later he has taken it with milk and occasionally spread on a piece of toasted bread. With these additions his bill of fare was complete. He has used it for weeks and still takes it with a relish. The taste is pleasant and digestion and assimilation are accomplished so readily that he feels no inconvenience after eating."

The writer has had a very large experience in the use of Rudisch's Sarco-Peptones, and without hesitation places them first in the list of predigested nitrogenous foods.

Of *raw food extracts* Dr. B. N. Towle says, in *Jour. Am. Med. Assoc.*, December 13, 1884:

I have used blood food or raw food extracts for more than four years in a large number of cases, and in no case of mal-nutrition has it failed to give relief.

I have given it to patients continuously for months with singular benefits, especially in complicated cases of dyspepsia attended with epigastric uneasiness arising from innervation, and in cases of nervous debility of long standing.

The sudden and full relief this food affords patients who have a constant faintness at the stomach, even immediately after taking food, shows how readily it is assimilated. The faintness is a form of hunger, and is the cry of the tissues for food, not quantity

but quality, a food that the famishing tissues can appropriate and thrive upon. Raw food is equally adapted to lingering acute diseases. I have used it in the troublesome sequelæ of scarlatina, where there was exhaustion from abscesses in the vicinity of the parotid and submaxillary glands, and in protracted convalescence from typhoid fever with marked advantage.

The cases that I especially value it in are laryngeal consumption and nervous exhaustion, in which cases there is always more or less derangement of the digestive tract, such as pain in the stomach, constipation, eructations of gases, distress after taking food, etc.

Raw food should be taken with each meal, the patients taking such other food as they can easily digest, in quantities suited to the individual cases. It adds much to the nutrition of the patient, overcomes the constipation, subdues the nervousness by increasing the strength, and is just the amount added which is required to secure success. Raw food added to the ordinary meal of invalids very often accomplishes the full meal, and is the satisfying portion.

Midzu ame, a new article of diet in our country is thus described in the *Medical News*, by Dr. J. C. Berry, of Okayama.

Midzu ame is an extract of barley-malt and rice, in the proportion of about one part in ten, and hence may be termed a malted extract of rice. It is prepared by steaming the rice (a variety very rich in gluten called mochigine) in perforated wooden boxes until fairly soft, when it is crushed and thoroughly mixed with the malt. After standing about twelve hours it is placed in bags and the contained liquor forced out by strong pressure. This is then slowly evaporated to the consistence of thick syrup, and, when ready for use, has a pale amber or amber-brown color, according to the care observed and amount of heat employed in its preparation.

Midzu ame has long been used by the Japanese as an article of diet for the sick, but not until within the last six or seven years has it been regarded as possessing medicinal properties. It is now employed as a medicine under the following conditions:

1. In cases of indigestion arising from nervous exhaustion or infirmity.

2. As an adjuvant to other remedies in cases where food medicines are required; *e.g.*, with cod liver oil emulsion, instead of barley-malt, in preparing the extractum malticum ferrum, diluted with dialyzed iron, etc.

3. As a nutrient and restorative in some exhausting diseases. For this a tablespoonful dissolved in hot water and added to a glass of rich milk makes a very nutritious and easily digested draught for the sick.

We have been in the habit of prescribing the Kumyss prepared by Dr. Brush for many years, and of its value as a nutrient in cases of weak digestion—no matter what the malady from which the patient suffers, and of course when the individual idiosyncrasy will admit of its selection—there can be no doubt, for the most remarkable results could be instanced.

Our experience quite coincides with that of Dr. R. B. Davy, who writes in the *Cincinnati Lancet and Clinic*, July 5, 1884: I have been prescribing the agent for over five years and have not met a single patient who absolutely refused to take it; moreover in all this time I have seen but two or three cases where it has not checked vomiting when such a result might reasonably have been expected. After taking from one to four bottles in the twenty-four hours for several days in succession the most delicate stomachs are able to take other food in considerable quantity without apparent injury. The indications for the use of Kumyss exist in all chronic wasting diseases attended with dyspepsia. It is especially applicable to consumption, as almost all such cases are attended with more or less disorder of the digestive apparatus. I believe that many cases of this disease cannot only be averted but actually cured in the earlier stages by the use of Kumyss and proper precautions as to fresh air. A most important measure in these cases is to administer with each glass a sufficient amount of sweet cream, which supplies carbonaceous matter in a manner by which its assimilation is assured. Whether from the reflex action on the coats of the stomach or from the soothing influence of the alcohol it contains, I cannot say, but it often relieves the cough of phthisical patients, and promotes expectoration when ordinary measures fail.

Dr. T. Lauder Brunton gives us a most interesting article "On Poisons Formed from Food, and their Relation to Biliousness and Diarrhœa," in the *Practitioner* for August, 1885, from which we extract as follows:

The tendency of milk and eggs to produce biliousness, or to be actually poisonous to certain persons, and of nitrogenous food such as meat, fish, or cheese to act as poisons when putrefaction has commenced, or of farinaceous food such as rye and maize to become poisonous when attacked by fungi are well established facts. A great deal remains to be done before the subject is thoroughly cleared up, but so much has been done by recent researches that it may be useful to give their results shortly and to indicate the bearing of these results on the pathology of disease, and more especially on the pathology of biliousness and diarrhœa. The cardinal fact which results from all these researches is that albuminous, or perhaps, to speak more correctly, proteid, substances which are themselves foods may be split up so as to yield poisons. This decomposition is usually originated by various

species of low organisms, and especially of bacilli, but it may be effected by the digestive ferments of the healthy body. The poisons formed by the decomposition of proteid bodies such as albumen, fibrin, and gelatine vary not only according to the particular body which is decomposed but to the particular organism or ferment which sets up decomposition, and according to the temperature at which it occurs and the length of time that it continues. Some of the products of the decomposition of proteid bodies are poisonous, others are innocuous. Among the poisonous bodies we find various degrees of activity, some being but slightly poisonous, while others are most virulent. When these poisonous products are separated from each other and isolated, they may remain unaltered and retain their properties for a length of time, but, when mixed together, they are apt to undergo further decomposition and become inert.

When the chemical molecules of which albumen is composed are broken up, in process of digestion, into peptones, these molecular fragments become dangerous, and peptones, when injected directly into the jugular vein, act as powerful poisons, producing loss of coagulability of the blood, fall of blood pressure, and death. But in the healthy body the peptones, formed by the digestion of albuminous matters in the digestion, do not enter the general circulation. They appear to be cemented again into the kind of albumen known as globuline, during their passage through the portal vein and the liver. It is when albumen has been split up so as to yield organic alkaloids that the products of its decomposition are most poisonous.

The importance of an exact knowledge of the substances which are produced by the decomposition of various foods by the action of typhoid bacilli on them is obvious. The plan of treating typhoid fever by an exclusively milk diet has probably saved many lives, but our use of this plan is, to a great extent, empirical. We do not fully know why it is successful, and although we may suppose that it is because the milk is non-irritating and does not irritate the intestinal ulcers, that is probably only a part of the truth. For milk may, and sometimes does, form very hard clots, which may pass through a great part of the intestine undigested, and, as we see in children, may actually be voided in this condition. Farinaceous food, on the other hand, is chiefly digested by the saliva and pancreatic juice before it reaches the lower part of the small intestine, and even if it did pass over the ulcerated surface ought to do no harm by its mechanical action. Acting on this idea, I have sometimes given starchy food in typhoid fever, but in a few trials it seemed to cause a rise in temperature, and I therefore abandoned it. If the effect of food in typhoid fever is a purely mechanical one upon the ulcerated intestine, calf's-foot jelly ought to be well tolerated; but if the typhoid bacilli decompose gelatine so as to produce alkaloids having a violent purgative action, the jelly will be very injurious.

As the putrefactive processes go on more quickly during summer, albuminous substances become poisonous much sooner than in winter, and again lose their poisonous properties more quickly by the progress of decomposition. As putrefaction may go on to a certain extent after the introduction of food into the intestinal canal, and will probably, from the higher temperature and greater moisture, go on even more quickly than outside, it is evident that poisons may be formed from the part eaten, and produce dangerous symptoms, while no poison can be found in the remaining parts of the same food. This is, perhaps, of special importance in regard to milk when used as a food for infants. Milk may apparently be quite sweet at the time it is given, and yet it may be really "on the turn," as the term is. When swallowed by the infant it may rapidly become sour, and disagree, while a portion of the same milk, especially if kept cool, may appear to continue sweet for some hours afterward. It is highly probable that not the least advantage possessed by milk drawn directly from the breast, over that given by a bottle, is that the former is free from bacteria with which the latter is apt to be contaminated.

Brieger has lately shown that pepsine will split up albuminous substances still further, so that by digesting fibrin with artificial gastric juice he has obtained an alkaloid to which he has given the name of peptotoxine. One fragment, as we may term it, which Brieger has got from flesh, is a substance called neuridine, which is innocuous, another, neurine, which is poisonous. From decomposing fish he has obtained a third substance, muscarine, which is more poisonous still, and two other substances, ethylenediamine, which is also poisonous, and gadinine, which is innocuous.

Kerner appears to have been the first to suspect the formation of alkaloids by the decomposition of albumen, and in 1820 he pointed out the resemblance between the symptoms of poisoning by sausages and by atropine.

PULQUE—Pulque is a Mexican drink which is found equally on the table of the rich and in the poorest Indian cabins in that country. It is extracted from the American agave, or maguey, by a series or operations, first of an agricultural, afterwards of a chemical, nature. It is a whitish liquid, principally composed of water, gluten and alcohol, is of a very pungent odor and gelatinous taste. It is largely used and recommended in gastric disorders, and is a tonic *par excellence*. It is considered very nutritious. In excess it produces a torpid form of drunkenness. The juice from the root and leaves of the agave has been used successfully in the treatment of, and as a prophylactic against, scurvy. It is said to be superior to lime juice for this purpose. It is employed by the Mexicans as a diuretic and as an emmenagogue.

CLINIQUE.

PHYSIOLOGICAL CENTRIPETALITY.

BY E. P. BANNING, SR., M.D., NEW YORK.

DEEPLY impressed that important lessons in pathology and therapeutics may be deduced from the striking analogy apparent between the construction and operations of the solar system and those of the human body, I offer some thoughts on the subject, hoping that more luminous pens may treat it more exhaustively.

We see that, by the centrifugal forces acting from centre to circumference, the solar system is kept whirling with a cumulative velocity, competent to hurl everything into space, but for the countervailing action of a centripetal force acting from the circumference, which maintains the normal status by binding everything to the centre, as the tire of a wheel binds the fellies and spokes to the hub.

This principle is universal throughout the domain of matter, and finds its culmination in the economy of the human body, which is a little universe in itself and is comprehensive of every force and principle in nature, and between which and the solar world there exists a striking and suggestive analogy, into which we propose to look for some practical lessons.

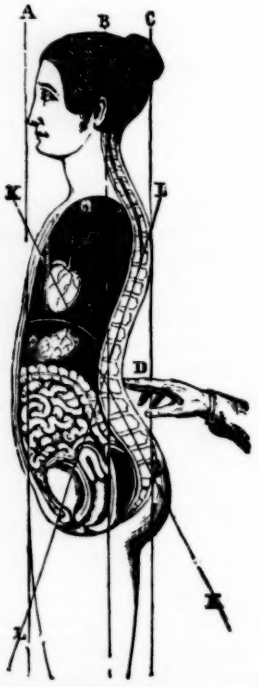

FIGURE 1.

Side view of the erect position, showing the upward and bracing out bearing of the Viscera.

First.—The vertical human body, as well as the revolving earth, has a centre of gravity, which centre the accompanying diagram (see Fig. 1) shows to be located in the dorso-lumbar curve. *B* shows a vertical line between the base and apex of the pile, which in its course to the ankle passes through the lumbar curve, showing the apex, base and curve to be precisely in line, and also that this curve is sufficiently advanced to serve as a pivotal point for equipoising the whole structure. This alone should show this curve to be the body's centre, but, for a mathematical demonstration of it, take notice of the two oblique lines, *KK* and *LL* respectively traversing the two advancing and retreating planes of the spine and crossing each other on line *B*, just where they pass through the lumbar curve, proving that to be the body's axial point.

Second.—We see the frame of this equipoised body filled from base to apex with plastic and weighty viscera, all of them lineally connected and that they are as much under an ordained and definite position and mutual bearing as the bones, and that when out of that bearing they rank with organs out of joint, and also that if they are at all left suspended from their connections or to dangle under the centrifugal force of their own gravity they are liable to be demoralized as to their organization and vital functions, and consequently, that some vertical force must sustain and compact them into a portable mass in the ascendant.

Third.—For this reason we see this depending vital mass encased in a muscular envelope, whose vertical action is so energetic as to maintain the whole in a state of vigorous coaptation in the ascendant.

Thus, then, we see that while the great solar system is held intact by an *immaterial* centripetality, this human microcosm is maintained in unity by a material and mechanical centripetality, as a band compacts the sheaf, a tire the wheel, or the federal constitution all the States; and to carry out the astronomic analogy assumed here, this system of muscles acting from the outermost circumference of the visceral system, answers to Neptune, remotest of the solar train, pursuing his solitary rounds, sole guardian of all the rest.

PHYSIOLOGICAL CONSIDERATIONS.

Having now seen that a firm upward compaction of the viscera is their normal state and also that the abdominal and dorsal muscles are the consummating and binding link of this compact state, which will fall and rise with the varying ratio of the muscular tone, we will now take a peep at what is involved: First, then, we see that the internal and external oblique, the inferior rectus and the pyramidalis

muscles, give a strongly predominant upward action to the bowels, whereby compressive weight is elevated from all sanguineous, lymphatic and nerve circulations between the trunk and extremities; that the bladder is given a large range for expansion; that the rectum and hemorrhoidal veins are correspondingly protected from obstructive compression from above; that the uterus and appendages, by the same means, are disencumbered of a depressing superincumbent weight, and its ligaments left to contend with the mere normal weight of that organ, and the vagina is permitted to enjoy a complete contraction of calibre. Furthermore, the supporting influence of the inferior bowels extends to the very apex of the abdominal cavity, firmly braces up the liver, spleen, stomach, pancreas, transverse colon, etc., so as not only to support them, but to cause the whole plastic mass to brace out and give proper rotundity to the epigastric, hypochondriac and umbilical regions and give these organs immunity from physical injury or irritation from the ordinary casualties of life. Again, this supported state of the abdominal viscera, of necessity, extends to the diaphragm and by a succession of supports must elevate it and render it correspondingly concavo-convex. Under the aggressive action of the abdominal muscles, much as springs tend to raise the passengers who are above as well as those who are within the coach, this in turn, also shortens the vertical thoracic cavity and increases the lateral and antero-posterior dimensions of it, and relieves the mediastinum of stress and gives a firm, undulating support to the weighty heart and relieves its ligaments and vessels of any suspensory service. Thus, looking at the subject in a purely mechanical light, we see a chain of indispensable prerequisites completely filled, all resting on a muscular base, which could not possibly be supplied from any other source. Truly, then, this muscular envelope is the binding link and *sine qua non* of the centripetal unity. This much for the physical protection of the aggressive vertical coaptation.

EFFECTS OF THIS ON THE ORGANIC ACTIVITIES.

But the effects of this same upward mutual pressure upon the vital activities of these organs, though less palpable, are of superlative importance. First we will say at the outset on this point, that such is the ordained constitution of things that mutual pressure of living parts in a normal direction acts as a quickener and stimulus. This is true throughout the whole organic domain. If two living trees press hard upon each other the pressure produces mutual absorption of substance; so also the moderate pressure of a dental band, by absorption produces a gutter around a tooth, although dental enamel is the lowest possible grade of vital susceptibility; still further the evocative action of approximation and reciprocal contact extends to the domain of spirit, betwixt man and man, as instanced by the power of boys to whistle a little in a grave-yard on a dark night, if they are huddled together, and also by the greater bravery of soldiers in battle when fighting shoulder to shoulder, so also is it with the viscera, their organic life is quickened by the ordained vertical mutual pressure.

Again, it is undeniable that animal heat is a vitalizer and that the stomach and bowels will have a high grade of organic tone and functional susceptibility and energy in the ratio that they possess a high degree of normal heat. This is aptly illustrated by a hearth of live embers; kept in a close juxtaposition, they glow until burned up; separated, they commence to die; conduction and the stimulus of contact being diminished and radiation of heat increased. Crowd the coals together again, and they glow and die again if separated. So also is it with the viscera; when well compacted, the vital generator is in operation, and a high organic tone is the result, and a lesser when the muscular tone is less. Such and much more are the legitimate benefits of a firm compaction of all the viscera in the ascendant, through the energetic muscular envelope.

TWO CASES OF CEPHALÆMATOMA.

PARALLEL RESULTS BY DIVERSE TREATMENT.

By Frank A. Rockwith, M.D.

On April 22, 1880, I delivered Mrs. J. E., Anglo-American, wife of a railroad official, of a male child, weighing seven and a half pounds, after a fairly easy accouchement; and of which I might incidentally remark that I had here in this case one of Playfair's conditions, a face delivery after a steady vertex presentation until the very last few pains, when, after a previous "hitch," as Playfair designates it, it suddenly changed to a face position, due also in this instance to "symptomatic" obliquity of the uterus. On the third day after this accouchement I was hastily called to see the child, with the statement that it had a very large swelling coming upon its head. Upon examination it proved to be my first experience of a cephalæmatoma, of which I had read frequently enough, but never met with during my 22 years of a somewhat plentiful obstetric practice.

This *thrombus neonatorum* so-called was situated at the right lambdoidal suture, just below the posterior fontanelle, involving the frontal bone only. It was already the size of a walnut. The child exhibited, however, otherwise no signs of any sub-

jective disturbances. The lady being an exceedingly intelligent and well-informed person, readily yielded to my advise of non-interference. The nurse, a model of obedience, promised to abstain from all local meddling. I had based this advise upon Prof. Gustav A. Braun's admonition,* that "neither compression, caustics, setons of silk, or opening with the knife and evacuation of the coagula is indicated, but on the contrary an absolutely expectant method is to be observed, which has yielded the best results."

The tumor continued to increase up to the sixth or seventh day, when it had seemingly reached its maximum size, that of a lemon. It remained stationary for thirty days and disappeared *suddenly* two days later, hence nearly six weeks from its first appearance.

Several days previous to this disappearance there was noticed the usual and characteristic osseous ring, with central depression, hence evidence of independent metamorphosis.

My second case of *thrombus neonatorum* occurred only four weeks later, justifying the popular idea that all phenomena usually occur in pairs.

As in the previous case, so in this, no swelling was noticed until the third day after confinement. These tumors (for there were two) were also located at the lambdoidal suture, the first being formed upon the occipital side of the suture and superior to the second, while this was located upon the parietal bone. They both attained their maximum enlargement on the fifth or sixth day, but were never as large as in the former case. The delivery in this case, that of a *primapara* in her thirty-second year, was tedious, and was finally terminated by the forceps (Bedford's). The osseous structure was roomy and well shaped, but the vaginal canal unduly narrow about the middle half of its length—a condition which I would designate by the heraldic term of "flanches," for I would hardly call such a condition of soft parts a stenosis nor a stricture, since both of these would naturally imply also an induration, which here was not the case.

Having to deal at this time with an illiterate self-willed woman, I thought it wiser not to pursue the former expectant course of treatment, but adopted one equally as well recommended as the former; besides that, I desired to take advantage of this opportunity to gain a comparative experience as to the better success between these diverse methods of treatment of such characteristic and exemplary conditions.

My first authority was Dr. Henry N. Guernsey, who says † that "he has met with quite a number (cephal-æmatomas) and has always been successful in curing them in a few days [?] with a single dose of calcarea carb. high."

Again, Hartmann says*: "The homœopathic treatment of such tumors is very simple and yet at the same time highly satisfactory; "absorption is easily accomplished by fomentations of a solution of a few drops of the tincture of arnica," etc. "Generally an improvement sets in in 36 hours."

Who would dare deny such authorities? And who, in obedience to a justifiable credulity, would prefer a six weeks' siege of expectation, when a single dose of calcarea (high) will cure in a few days, or when a simple fomentation of a few drops of arnica and water will bring about such results in 36 hours?

Thus fortified in argument and abjuring every and any sinister motive, I prescribed *lege artis homœopathiæ Hahnemanniani*.

I ordered arnica fomentations and rhus (200) (in absence of Hartmann's 30th). Seeing no change after the sixth day I betook myself to the more attractive calc. carb. high (200). Forty days having expired my patroness became restless and requested consultation. I invited a medical friend and honestly imparting to him my actions in the case, was advised by him to further "observe expectancy." I strongly suspected him of satire, but nevertheless repeated the single dose of calcarea high; that is, the 200th, beyond which I positively decline to go. Not that I doubt the efficacy of higher potencies, but my individual mind being finite, is incapable of following. Ten days later I was informed that the tumor had suddenly disappeared "that morning."

Now, I do not desire controversy upon these cases. I simply give them as honest conscientious studies of two systems of treatment having for their authorities names unblemished and eminent in the annals of medicine.

I may not have done at all right, either in not increasing the potency or selecting a new key-note for another remedy. But be this as it may, I certainly and most emphatically affirm my highest admiration for the practitioners of that fascinating school of medicine; only that I must confess myself incapable by mental limitation of practicing their art. I am protected in this by law, which expects no impossibilities of any man, but only an average fair knowledge of the rudiments of an art. This is all I can claim to posssess. I envy the advocates of infinitesimalism their undeniably brilliant success. But we are not all geniuses. There was a time when I sought faithfully to practice the system of the 200th attenuation, but it was of no use to strive after the impossible. It made my brain reel, my mind began to fail me. I had become a walking repertory of the symptoms of two or three hundred remedies. In this

* "Compendium der Kinderheilkunde," page 69, 2d ed., Wien, 1871.
† "Guernsey's Obstetrics," page 874.

* "Hempel's Hartmann's Diseases of Children," 1853, page 52.

I was perhaps to blame, for I could not get myself to adopt a perambulating satchel library. It is true lawyers do it, but to me it seemed to impeach upon the dignity of a physician, who is expected to carry his knowledge at his fingers' end. Hence, too, it was that I wrote, some years ago, what I intended to be my farewell paper, "The Period of Reaction." And reaction has come. Here and there a last lingering ember may still be glowing, and anon one more sad wail may rise from the depths of sombre Tartarus; still the onward surging tide of reaction will drown its weird echo, and "*Welle du Woge*" preludes, with Wagnerian tempo, the coming symphony of a new era of reason and of matter-of-fact dicta.

SOME INDICATIONS FOR THE USE OF MEDICATED TABLETS.*†

Monobromide camphor, $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. Cerebral congestion with great nervous erethism; delirium; headache from mental excitement, sexual erethism; epileptiform, hysteric and choreiform spasms; coldness of the body and extremities, with cramps and jactitations.

Morph. mur. or sulph., $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit.

Morphine purum, $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit.

A narcotic, hypnotic and anodyne.

Murex purp., $\frac{6}{10}$, trit. Acts especially upon the uterus; has proved curative in uterine congestion; there is sinking at the pit of the stomach, pains in the breasts; increased sexual desire.

Narcotinum, $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. A narcotic; used in India as an anti-periodic.

Natr. carb., $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. Weakness of the stomach; deficient menstruation in adult females; headache from exposure to the sun. A remedy rarely used.

Natr. mur., $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. In intermittent fever, when exanthematous spots on the lips; great thirst before and during chill; no thirst during hot stage; in the heat or at its close a hammering headache, sometimes lasting, after the sweat; attack comes on in the fore part of the day; in constipation and deficient menstruation; dry and ill-colored skin; great depression of spirits; symptoms showing a scorbutic condition.

Natr. sulph., $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. Has been used in phthisis, chronic diarrhœa and flatulence; in sciatica; recurrent inflammatory colic, the pain commencing in the right groin; in hydræmic states with gonorrhœal anamnesis.

Natr. salicyl., $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. In rheumatism, acute, articular and muscular; an antiperiodic; atonic; dyspepsia.

Niccolum carb., $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit.; niccolum sulph., $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. Itching over the whole body, followed by small vesicles; hoarseness every year at the same time; nasal catarrh; menses scanty and late.

Nux vomica, ½, 1 and 2 minims; $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. In dyspepsia and gastric disorders; in constipation; suits vigorous persons of tense fibres and irascible natures; bad effects of coffee and alcohol in any form; sedentary habits, great mental exertion and strain; sleeplessness, awakes in the early morning to fall asleep again, and wakes up late, feeling very much worse; great nervousness, headache, weight after food, with flatulence and heartburn and great irritability; in the latter stages of delirium tremens; morning vomiting and trembling of the hands; in apoplexy; headache of strong plethoric adults, with congestion, giddiness, flushed face, and constipation; clavus and migraine; in gastritis, gastralgia, and many forms of dyspepsia; dry coryza and "stuffy colds;" spasmodic asthma; irritable bladder; uterine troubles when too frequent and too copious periods; in ague when the gastro-intestinal symptoms call for it.

Opium, ½, 1 and two minims; $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. A certain form of obstinate constipation; in lead colic; in acute fevers, with sopor bordering upon stupor; absence of any complaint; snoring, half-jerking of the limbs, and burning heat of perspiring body; atonic dyspepsia of drunkards; delirium tremens; retention of urine; in threatened apoplexy.

Oxalic acid, $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. Mainly affects the brain; dull headache of forehead and vertex; palpitation of the heart on going to bed; colic about the navel; difficult emission of flatus; irritation of genito-urinary tract, with diuresis; great exhilaration of spirits; spinal meningitis. (?)

Osmium, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. Supra-orbital headache, dimness of vision; sexual excitement; urine dark and scanty, and albuminous; the emanations from osmium have produced broncho-pneumonia; hoarseness and cough.

Palladium, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. Rheumatic pains, changing about; itching and crawling sensations in different parts of the body; constipation; frequent, scanty urine; bloody urine with stitches through urethra and bladder.

Phosphorus, 1 and 2 minims; $\frac{3}{10}$, $\frac{6}{10}$, trit. Congests the lungs, necroses the maxillæ, softens the nervous centres, liquefies the blood and causes fatty degeneration throughout the body; typhoid depression; nervous exhaustion; neuralgia; paralysis; irritable weakness of the male sexual organs from excessive venery; impotentia senilis; chronic gastric

* Continued from page 205 of THE TIMES.

†Those practitioners who are in the habit of exhibiting vile mixtures for the treatment of the sick, will be much better satisfied themselves, and confer a great boon upon their patients which will be appreciated, if they will adopt the convenient[ ] an [ ] scribing tablets.—EDS.

catarrh, sour risings, heat at the epigastrium, flatulence, canine hunger, vomits what has been drank as soon as it becomes warm in the stomach; constipation; small, hard stools; painless morning diarrhœa, very debilitating; proctitis, discharge of blood and pus, with tenesmus; in various respiratory affections; pneumonia; tickling cough, worse before midnight; in fatty liver; jaundice; petechiæ and hemorrhages; typhoid depression; in Bright's disease, bloody urine and albuminuria; in fungus hæmatodes; small wounds bleed freely; chronic mastitis where sinuses have been left in the gland.

Phosphide of zinc, $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{6}{10}$, trit. Secondary effects of cerebral congestion; debility, paralysis and mental depression; passive cerebral congestion; cerebral anæmia; in hydrocephaloid; the brain-fag of literary men and brain-workers; mercurial trembling.

INCONTINENCE OF URINE.—Professor Bartholow points to four factors in incontinence of urine; acidity of the urine and relaxation of the vesical sphincter being the most prominent; spasmodic contractility of the muscular coat during sleep as the third factor, and the fourth, which is comparatively rare, is dreaming of a desire to urinate when the bladder is full (the brain being here at fault). For acidity of the urine, the persistent administration of bicarbonate of potash, or some other alkaline salt of potash, in an effervescent draught is advised. The incompetency of the sphincter is to be treated by half grain doses of aqueous extract of ergot and a quarter of a grain of extract of nux vomica. Bromides should be given at night to diminish the contractility of the muscular coat of the bladder. Many of these patients are anæmic, and the administration of iodide of iron is indicated.

ARRESTING MENSTRUAL DISCHARGE BY THE INTERNAL USE OF VINEGAR.—In the *Russkria Meditzina*, No. 6, 1885, p. 128, Dr. Vekhames, of Saratov, refers to an article by Dr. W. C. Grigg, in the *British Medical Journal*, January, 1884, p. 56, and mentions an instance of the hæmostatic action of vinegar, taken internally. A strong and healthy lady, aged 24, with regular menses of six days' duration, once happened to be invited to a ball on the third day of a catamenial period. To make herself fit for dancing, she, at the recommendation of a lady friend, swallowed a glassful of vinegar. The catamenia at once ceased, and did not return for the remaining three days.

PYRIDINE.—An interesting essay was recently read before the Académie des Sciences on pyridine in asthma. The writer claims it is the best palliative for use during the attacks known. A fluid drachm is poured upon a napkin and inhaled for twenty or thirty minutes three times a day. The relief, he says, is prompt and decided.

FRECKLES.—For removing freckles, Wertheim, of Vienna, recommends the application every other night for five or six weeks, of a thin layer of ointment composed of

Hydrarg. ammon.	10 parts.
Bismuth subnitratis	10 "
Vaseline	100 "

MANAGEMENT OF OLD AGE.—Old people will often be among your most profitable patients, and you will be frequently called upon to give advice in regard to the prolongation of life. In carrying this out, there are three ideas to be considered. I am now supposing that you are treating an old person with abundant means. The first thing is protection from all untoward influences. A large proportion of those who are said to die of old age, really die from the effects of exposure, and it must be remembered that the term exposure is relative. What in a young man may be nothing, may to an old man be a serious matter. One of the most perfect protections from cold is a buckskin jacket. Every person who is 75 years old, and whose physical powers are beginning to fail, should be put in a buckskin jacket, extending from the shoulders to the hips. There is no flannel, silk or anything else, which will compare with buckskin in preventing chilling of the body. Chilling of the surface in an old person means a rush of blood to internal organs, where from weakness of the vasomotor system and the condition of the vessels, contraction cannot take place, and the congestion is even apt to be followed by pneumonia, or other inflammation must result.

These patients must be guarded especially against exposure to winds. Damp is feared by many and credited with causing many affections, but where damp has slain its thousands among the aged, high winds have slain their tens of thousands. This caution applies not only to old age, but to all cases in which there is a tendency to cardiac failure. High winds chill the surface, oppress respiration, and are exceedingly disastrous to the life of any person whose circulation is without power.

I need not say anything with regard to preserving the nervous system from all shocks. All accidents are of course to be carefully guarded against, and all excessive bodily or mental exercise. Remember, excessive is a relative term, and for the weak excessive may be very little. Rest is of great importance; indeed, old people should spend many hours in bed.

The next point is in reference to diet. The food should be light but nutritious. Stimulating food should be withdrawn. Meat should be used but sparingly. What we start with, to that we finally come in this life. Man, who begins on milk, should in the last years of his life make milk the chief article of his diet.

Finally, in regard to medicine. If your patient, approaching his eightieth year, can be made an opium eater, you will, in the majority of cases protract his life many months or years. In these cases the opium is to be used carefully, and in such a way that the patient cannot rapidly increase the dose of it. A number of years ago I was called to see an old man. He was thought to be dying at that time, but he is still alive at 84. For the past ten years he has taken an opium suppository every night, but beginning with one grain, he has now only reached two and a half or three grains. When he is restless, or there is a tendency to diarrhœa (for he has suffered with enteritis for a number of years), he takes two or three suppositories. Unless the patient has more than the ordinary will power, it is essential that the opium be administered by some one else.—HORATIO C. WOOD, *Medical and Surgical Reporter*.

THE COMBINED ADMINISTRATION OF BELLADONNA AND IODIDE OF POTASSIUM.—Aubert (*Lyon Medicale*) affirms that the headache and coryza experienced after taking large doses of iodide of potassium may be entirely prevented by the judicious use of belladonna. In the case reported, eighty grains of iodide were given daily, one grain of the extract belladonna being administered in the evening. After a few days, the writer states, it is possible to suspend the use of the latter drug without any danger of a recurrence of the iodism.

The New York Medical Times.

A MONTHLY JOURNAL

OF

MEDICINE, SURGERY, AND COLLATERAL SCIENCES.

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Business Communications should be addressed, "**Publishers, 526 Fifth Ave.,**" and Checks, etc., made payable to THE NEW YORK MEDICAL TIMES.

Published on the First of each month.

OFFICE, 526 FIFTH AVENUE, NEW YORK.

NEW YORK, NOVEMBER, 1885.

"*A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and* OUGHT *to be the* ONLY ACKNOWLEDGED RIGHT *of an individual to the exercise and honors of his profession.*"—Code of Medical Ethics, Amer. Med. Ass., Art. iv., Sec. 1.

Our practice is *not* "based on an exclusive dogma, to the *rejection* of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology and organic chemistry."

IS IT WISE?

KNOWLEDGE should lead to practical results and a course of study should either be such as to discipline the mind by teaching it how to think, to analyze, and to utilize, or to store it with facts and a knowledge of principles which can be brought into practical daily use. To this end the efforts of educators in our literary institutions are directed. They seek less to make of their students profound and accomplished scholars than to start them well on their way, to instruct them in great principles, to teach them how to think logically and to utilize their knowledge for their own benefit and that of others. The groundwork is, or should be, laid for future knowledge and future usefulness. It seems to us the same point should be constantly borne in mind by educators in our medical institutions. It should not be expected that students just out of a medical college should possess as great practical knowledge of disease as the well-educated veteran who has kept up with the advancement of science and the literature of his profession, having supplemented theory with the practical knowledge gained by close study and daily observations at the sick bed.

It requires something more than a careful study of anatomy to handle the knife with dexterity and tell when it can be used with safety and profit, and the eye and touch, trained with long observation of and contact with disease, often make a diagnosis more prompt and sure and suggest a treatment more effectual than can be secured by text-books or through the brains of others. A certain knowledge of facts, of principles and of chemical and mechanical manipulation sufficient to enable the young physician to work out the problem of disease with as much understanding as the limits of our art will permit is quite sufficient to fill up the time usually devoted to study before entering the profession.

The crowding of the mind with minute details of no practical use, learned only to be forgotten, is not only a waste of time which can poorly be spared, but a positive harm in confusing the mind and lumbering it with rubbish which impedes the clearness and freedom of thought so necessary to the physician.

In a little social gathering recently, a professor in one of our medical colleges was detailing to his brethren some of the questions which students were expected to answer in their final examination. To the question, how many of your brethren in the faculty do you suppose could answer all of these questions without immediate preparation? the prompt reply was, not one; and probably not a member of the faculty suddenly called upon could pass the examination expected of the students.

Where is the wisdom in requiring the student to toil through these long weary years in acquiring information of no practical use either in mental training or to draw upon in future emergencies and which will speedily be forgotten as he goes out into his profession, in the active duties of life and the living issues of the day?

It seems to us the great deficiency in the curriculum of study in most colleges is the lack of the practical, and the crowding in of useless detail. More time spent in thoroughly mastering the principles of our art, in familiarizing himself with its great landmarks in clinical observations and well trained laboratory work would better fit the student for his life work than the course of training now pursued. The outlines of a great art, as far as it is understood, should be clear and distinct before him and the way prepared for subjecting old thought to scrutiny, for opening new lines of investigation, leading to new and original conclusions. If the medical educators will give the students more practical instruction we shall have fewer calls for legislative aid and hear less of a higher medical education.

MORTALITY IN THE UNITED STATES.

THE report of Dr. John S. Billings on the mortality and vital statistics of the United States, based upon the returns of the census of 1880, contains a mass of interesting facts some of which sweep away many of our previous conclusions. As, for instance, it is found the death-rate among the Indians is much higher than among the whites, especially in consumption, from which, from the very nature of their life, we had supposed them to be tolerably exempt. The deaths from consumption compared with the whites is 286 to 166, and the fatality in venereal disease is seventeen times in excess of that of the white race. The ease with which the Indian women give birth to children has been a standing argument to show that the pains and perils of childbirth are due in a great measure to the lack of physical strength gained by a life in the open air, and the introduction into our homes and life of those luxuries which naturally follow in the wake of a higher civilization. The facts show that the fatality in pregnancy among these women whose lives are mostly spent in the open air is twice as great as among their white sisters who are surrounded by the comforts and can avail themselves of the helps of civilized life.

Another important point brought out by Dr. Billings, worthy of the close attention of the statesmen and the philanthropist, is the difference of the death-rate in races. Thus, the number of deaths enumerated in the United States in 1880, is stated to be 750,893, which would give a death-rate of 15.09 per thousand. Dr. Billings thinks, however, that this enumeration is too small and a more correct average would be 18 per thousand of population, but even this is less than any other civilized country, that of Austria being 26.6 and Italy 30.5 per thousand.

Comparing in this country the mortality among the black and Indian races with the white, we find it is two and a half per thousand more among the colored population, and nearly six more per thousand among the Indians. This may be in part due to the greater amount of poverty and the general ignorance of the colored and Indian races compared with the white, but is there not another factor which enters largely into the fact of the gradual wasting away of these two races? It is an historical fact that the weaker race melts away when brought in contact with the stronger, and in time loses its identity as a distinct power, its life weakening and gradually expiring under the influence of a stronger, more progressive and vigorous vitality. The Indian, as a race, is steadily diminishing in number, and the colored race in this country, now that it is no longer looked upon as property, will also rapidly diminish. This seem to be an inevitable law of life, and this law more than any legislative enactments, will hold this continent for the white race until some other with a stronger vitality and a higher spirit of progress shall assert its superiority.

Notwithstanding our death-rate is less than any of the nations of Europe, the crowding of population is much less, and the facilities for acquiring a comfortable subsistence greater than in the older nations There is no question but what the mortality is still too large, and that a large per cent. ought and will be in time prevented. This will be accomplished with greater attention given to hygiene and a closer study of the causes of disease.

VACCINATION.

THE prevalence of variola almost in our very midst, brings the subject of prophylaxis prominently into view. At this time, the great majority of medical men appear to approve of vaccination as the most efficient and practical method of preventing the spread of small-pox, as well as being the best known means of ameliorating or aborting the disease in such as are so unfortunate as to become infected with it. It is a well-known fact which statistics will verify, that the officials connected with our hospitals for this class of cases never become infected, although they are constantly exposed, and it is fair to presume that the immunity is due to the frequent re-vaccination which is practised. The occasional unfortunate result which obtains after vaccination should not deter us from its practice, but rather should lead us to the utmost caution regarding its performance and in the selection of patients upon which to operate.

We cannot be too careful as to the source of the virus, as to the proper time to be vaccinated, or as to the condition of the patient to be vaccinated. The cases, so far as we know, in which bad results

have followed, can be accounted for upon some of these grounds. The medical man can do more than any other to educate the ignorant as to the true status of this controversy, and it should be done before the excitement of the outbreak of an epidemic is upon us, for then argument is often useless and disaster is the result. The bitterness with which vaccination is condemned in some circles, regardless of truth, while it shows entire disbelief in this defence against the spread of small-pox, is no evidence whatever in condemnation.

Dr. Mandeville, who speaks from careful study and large experience, presents, on another page, a strong argument for a return to the Jennerian practice of using humanized virus instead of bovine in vaccination for the prevention of small-pox. He claims that it is attended with less physical disturbance, is more certain, and that the danger of communicating other diseases through it is *nil*. Public prejudice is so strong, however, against humanized virus that it will probably never regain its hold upon the community. The charges against the severity of the action of bovine virus and its uncertainty will, no doubt in time, entirely disappear as more careful and scientific study is given to the subject.

We are inclined to think even now if as much care were given to the production of bovine virus as there is to the selection of the humanized, the great objection of uncertainty and increased physical disturbance would disappear. The child from whose arm the virus is taken is carefully selected with a special eye to its present health and freedom from transmitted disease, only the typical pustule chosen and the virus gathered at precisely the right time. With the calf not only the same care can be taken, but each crop tested with the microscope to see that it contains the elements of success and is free from those influences which often create the deep sloughing sore and the febrile disturbances. The producer who will guarantee this care in the production, purity and richness of his goods will be eagerly patronized by the public.

THE PUBLIC HEALTH.

NOTWITHSTANDING the fears freely expressed last summer and winter, that we should certainly be visited by cholera this summer, neither our city or the country at large has been as free from epidemic diseases as during the past year. In this city the number of deaths reported during the week ending October 24th was 531, showing the lowest death-rate known in the city for many years. It has been noted, too, that during the summer the rate of infant mortality has been far less than for a generation.

The excellent condition of the public health so apparent in our own country has been equally manifest in many of the European nations, more especially in England. In London, in September and October, the death-rate was less than it has been since 1840, and during the entire past year the health has been better than for more than a quarter of a century. This improved condition is undoubtedly owing in part to climatic influences, for during the past year there has been a singular absence of great and sudden changes of temperature, but the increased knowledge of correct hygienic and sanitary conditions has not been without a very marked influence in promoting comfort and health.[1] The health boards, national, State, city and village, have been watchful guardians of public health, and together with the profession, have rendered efficient service in the prevention of disease. There is no organization in the world with more ample facilities and absolute power in carrying out its decisions than the board of health of New York. Tenement houses, plumbing, sewerage, must all be constructed in accordance with the most approved scientific plan if they are expected to meet with their approval. The result is, in the crowded part of the city, where epidemic diseases are usually so fatal, there is now less filth, less disease, and more comfortable homes than ever before. It is an interesting fact, as shown by life insurance statistics, that the average duration of life is greater by several years now than when the Carlisle tables were constructed. If civilization, with its comforts and luxuries, introduces new diseases, it teaches also, or should teach, how in a large measure to prevent or control them.

A HOSPITAL WE NEED.

THE Charity Organization Society is doing excellent service in ridding society of a class of professional and unworthy beggars. The work might well

be extended to the purification of some of the institutions themselves which cheat the profession by accepting patients perfectly able to pay for treatment.

We know of instances where patients with large incomes have been admitted to hospital at a cost for board equal to any ordinary boarding-house—the medical treatment, of course, being free—who in time became the private patients of the hospital attending physician.

The members of the profession, therefore, aid in building hospitals, for what? Apparently to defraud themselves out of patients, and to build up a class, some of whom have no sense of justice, to say nothing of the violation of that code which all honorable physicians profess to respect and obey.

What is needed in this city at present is a hospital where patients may be sent and continue to have the care of their chosen physician, the same as they would in their own homes. Such an institution would be a real help to the profession and might save some dishonorable dealing on the part of some.

DR. P. P. WELLS ON THE AMERICAN INSTITUTE OF HOMŒOPATHY.

IN the August number of the *Medical Advance*, Dr. P. P. Wells overhauls the presidential address at the meeting of the Institute at St. Louis.

Quoting from the president's remarks at the banquet, "We are a free people, bound by no law," Dr. Wells says: "Is this true of the American Institute and its president? Is this body a representative of homœopathy? But homœopathy is law and it is *nothing else*. If homœopathy does not represent this law, what in the name of reason does it represent? Ostensibly a body pretending to represent law, are they found thus proclaiming themselves independent of law, representatives of neither law nor principle but only an assembly of criminals? Was it intended by this declaration of the status of the Institute to proclaim to the world that it had abandoned allegiance to God's law and so had ceased to be an Institute of Homœopathy. The proclamation, we feel justified in assuring them, was not needed. The fact has been long and painfully apparent to all who love law and obedience to it."

From the above extract it appears, from the standpoint of one who prides himself upon being a pure Hahnemannian, that the American Institute of Homœopathy is sailing under false colors, and appropriating to itself a name to which it is not honestly entitled. It must be apparent to even the majority of the members of the Institute that any other name would represent the character of the organization and its belief and practice just as well and with a much greater show of honesty than the one to which it clings with such undying tenacity. Look over the volumes of Transactions and you will find the majority of the papers discussing subjects in a manner which would be accepted in old school Transactions without a word of dissent. And yet, any attempt to change the name calls forth a storm of indignation in which the shade of Hahnemann and all the saints in the Homœopathic calendar are summoned to the rescue. Why this clinging to a name which represents, it is true, a great principle, but only a small portion of the medical belief and practice of nine-tenths of the Society? Is there any truth in the charge so often made that this honored name is used as a trade-mark for purely selfish purposes? Homœopathic societies may always be needed for the careful study of the Materia Medica and the application of the homœopathic principle to therapeutics, but is it not true that the necessity which so long existed for the adherents of new truths banding themselves together for mutual improvement and protection, owing to the intolerance of the old school, no longer exists? The most advanced men in that school trample upon the old code with its iron-bound rules and say, "let us meet as educated men on a common ground." Is it true that the cloak of bigotry and intolerance has been transposed from the old school to the new?

TYROTOXICON—CHEESE POISON.

AT a meeting of the Michigan State Board of Health, July 14, 1885, Professor V. C. Vaughan presented a report of his investigations on poisonous cheese. It is well known that cases of severe illness follow the eating of some cheese. A few years ago, the reputation of a large cheese factory in Northern Ohio was destroyed by the great number of cases of alarming illness arising from eating its cheese. Dairymen know this cheese as "sick cheese."

The old foul-smelling cheese, such as limburger and schweitzer, has never been known to be poisonous.

The symptoms produced by sick cheese are as follows: Dryness of the mouth and throat with a sense of constriction, nausea, vomiting, diarrhœa, headache, sometimes double vision and marked nervous prostration. In rare instances the sufferer dies from collapse. As a rule recovery occurs in a few hours, or at most after a few days. The symptoms of cheese poisoning and those of sausage, canned meat and fish poisoning, are very similar, though death results more frequently from the others mentioned than from cheese poisoning.

There is no certain means, aside from a chemical examination, by which a poisonous cheese can be distinguished from a wholesome one. The most reliable ready method is probably that proposed by Dr. Vaughan a year ago, and it is as follows: Press a small strip of blue litmus paper (which can be obtained at any drug store) against a freshly cut surface of the cheese; if the paper is reddened instantly and intensely, the cheese may be regarded with suspicion. Dr. Vaughan does not regard the above test as free from error, but as the most reliable ready means now known. Every groceryman should apply this test to each fresh cheese which he cuts. The depth of the reddening of the paper may be compared with that produced by cheese which is known to be wholesome.

Dogs and cats, at least, are not affected by eating poisonous cheese. This is probably due to the fact that they do not get enough of the poison from the amount of cheese which they eat.

Dr. Vaughan has succeeded in isolating the poison. It is a product of slight putrefaction in the cheese, which probably occurs in the vat, as the curd has been known to poison a person. By this slight putrefaction, or excessive fermentation, as it may be called, a large amount of butyric acid is formed, and this in the presence of the casein of the cheese, is capable of developing a poison. Different samples of the poisonous cheese contain different amounts of the poison. The poison was obtained in long needle-shaped crystals, which are freely soluble in water, chloroform, alcohol and ether. The smallest visible fragment of crystal placed upon the end of the tongue causes a sharp, stinging pain at the point of application, and, in a few minutes, dryness and constriction of the throat. A slightly larger amount produced nausea, vomiting and diarrhœa. The poison is volatile at the temperature of boiling water, and for this reason even poisonous cheese may be eaten with impunity after being cooked. The substance has also a marked pungent odor, and through the nose one can obtain sufficient of the volatile poison to produce dryness of the throat. This is true, however, only of the isolated poison. In the cheese the taste and odor of the poison are both modified to such an extent that they would not be recognized, as has already been stated.

The first step in the study of cheese poisoning has now been taken, by finding out what the poison is. Efforts will be made to ascertain the means for preventing its formation.

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EPITHELIOMA OF THE MOUTH. By H. I. Ostrom, M.D., Author of "A Treatise on the Breast and its Surgical Diseases," etc., etc. New York: A. L. Chattertorf Company, 1885, pp 120. 16mo.

This little monograph embraces an exhaustive study of the subject of epithelioma of the mouth, and will be found of practical service to those who have to deal with such cases, embracing as it does the various means of modern surgical and therapeutical treatment.

INEBRIISM. A Pathological and Psychological Study. By T. L. Wright, M.D., Member of American Association for the Cure of Inebriates. Columbus, Ohio: William G. Hubbard, 1885. pp. 222. 12mo.

The object of this volume is to discover the causes of alcoholic inebriety, determine its pathological results, as well as the laws which seem to govern its dissemination and the influence of heredity. The subject is intelligently elaborated in readable text, and those interested in the subject will find the book worthy of possession.

THE MANAGEMENT OF LABOR AND OF THE LYING-IN PERIOD. A Guide for the Young Practitioner. By Henry G. Landis, A.M., M.D., Professor of Obstetrics and Diseases of Women in Starling Medical College; Fellow of the American Academy of Medicine; Member of the American Medical Association; Author of "How to Use the Forceps;" A Compend of Obstetrics, etc., etc., etc. Philadelphia: Lea Brothers & Co. 1885. pp. 330. 12mo.

The aim of this book is to furnish a guide to practice in the department of which it treats. Divested of all superfluous detail, it is eminently practical, and will serve as an excellent hand-book for the student and the busy practitioner.

A SYSTEM OF OBSTETRIC MEDICINE AND SURGERY, THEORETICAL AND CLINICAL. By Robert Barnes, M.D., and Fancourt Barnes, M.D. Illustrated with two hundred and thirty-one wood cuts. Philadelphia: Lea Brothers & Co., 1885.

Any work from the pen of so careful an observer and scientific writer as Dr. Barnes will receive a warm welcome from the profession who owe so much in the past to his teaching. Father and son have united their labors and the result is a

volume, full of scientific research, practical, clinical observation and original thought. Even to the physician in general practice who avoids as much as possible distinct obstetrical work, the great problems in general medicine and surgery with which he has constantly to deal render an intimate knowledge of the processes of gestation, parturition and puerpery, with the complication and the general disturbance of the system arising from them, of the utmost importance. These subjects follow each other in natural sequence, and are treated with such simplicity and fullness of information that the strong points are easily impressed upon the mind. The work takes rank as one of the best of the numerous excellent books upon obstetrics which have recently issued from the medical press.

RATIONALISM IN MEDICAL TREATMENT, OR THE RESTORATION OF CHEMISM THE SYSTEM OF THE FUTURE. By William Thornton, 3 Hamilton Place, Boston. 1885. pp. 46. 16mo. Published by the Author.

The term "Rationalism" is defined on the title page of this little book as "the internal treatment of diseases by chemicals of like nature to those that are found within the body in a healthy state," and the dedication is to "those who think and reason."

In his preface the author says; "Having labored hard and long for the discoveries I have made," etc., but fails in his text to show what the "discoveries" are! The book reads as if it were intended for laymen, and as such would serve the author's purpose

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MILK ANALYSIS AND INFANT FEEDING. A practical treatise on the Examination of Human and Cow's Milk, Cream, Condensed Milk, etc., and Directions as to the Diet of Young Infants. By Arthur V. Meigs, M.D., Physician to the Pennsylvania Hospital and to the Children's Hospital; Fellow of the College of Physicians of Philadelphia, etc. Philadelphia: P. Blakiston, Son & Co. 1885. pp. 102. 12mo.

The author of this book has evidently given much patient study to any important subject, and his results have not been obtained without vast experimentation.

He is convinced that human milk contains much less casein than has been generally supposed—only about one per cent.—and the methods of analysis are elaborately set forth.

MATERIA MEDICA COLLECTION FOR STUDENTS OF PHARMACY AND MEDICINE. Containing Specimens of all Crude Drugs of Vegetable Origin recognized in the U. S. Pharmacopœia, and many not so recognized that are in common use—in all 288 specimens. Indispensable to the student of pharmacy. Parke, Davis & Co., Detroit, Mich.

The student can familiarize himself, practically, with the properties of drugs only as he has the opportunity to examine and handle specimens himself. The descriptions of text books, even when aided by elaborate engravings, appeal only to the imagination, and the impression received from reading is consequently of necessity imperfect—often misleading and always evanescent. It is not enough, even, that the student have access to cabinet collections, although these render excellent educational service.

Specimens of many of the common drugs are of course easily procured at any drug store for such examinations, but there are many which are not thus accessible, and it is, moreover, important that the specimens shall be all of unquestionable authenticity.

The present collection includes all the crude drugs of vegetable origin that are of any importance in the materia medica.

Each specimen is put up in a little box, with a label bearing simply a number, an index or key accompanying the case. The index being alphabetically arranged, enables the student to find any required specimen without difficulty, while the absence of names on the labels enables him to practise himself in the identification of drugs.

MANUAL OF THE DISEASES OF WOMEN. Being a Concise and Systematic Exposition of the Theory and Practice of Gynæcology. For use of Students and Practitioners. By Charles H. May, M.D., late House Physician, Mt. Sinai Hospital, New York. Assistant to the Chair of Ophthalmology, New York Polyclinic; Clinical Assistant, Department of Ophthalmology, Manhattan Eye and Ear Hospital, New York. Philadelphia: Lea Brothers & Co., 1885. Pp. 356. 12 mo.

The author of this work has aimed to give in a form adapted to students and as a hand-book, the characteristic symptoms which occur in the various diseases to which woman is subject. The work appears to be excellently done and to serve the purpose well. The practitioner will find it useful in cases where only a glance is required to refresh the memory.

LECTURES ON CLINICAL OTOLOGY. Delivered before the Senior Class in the New York Homœopathic Medical College. To which are added cases from Practice and Summaries of Remedies. By Henry C. Houghton, M.D., Senior Aural Surgeon to the New York Ophthalmic Hospital; Professor of Otology, in the College of the New York Ophthalmic Hospital; Professor of Clinical Otology, in the New York Homœopathic College. Formerly Professor of Physiology in the New York Medical College and Hospital for Women. Formerly Professor of Physiology, in the New York Homœopathic Medical College; Member of the American Institute of Homœopathy. Formerly President of the American Homœopathic Ophthalmological and Otological Society. Boston: Otis Clapp & Son. 1885. Pp. 260. 8 vo.

As the title indicates, this volume embraces a series of lectures on diseases of the ear, to which have been added reports of clinical cases and summaries of remedies.

The author says, "the book is not written for the specialist, but for the student and the busy practitioner, who will find in it suggestions for the treatment of aural diseases and indications for remedies that have proved effective in a large clinical practice," and doubtless those for whom it was written will feel well satisfied with the result, as the text is concisely stated, is necessarily practical by being based upon clinical investigation and is not intended to take the place of the customary text-book in its department. The publishers have done their part well and the work will have, without doubt, a wide reading with the class for which it is intended.

North American Review.—This valued serial continues in the even tenor of its way, and provides us in each issue with most substantial reading. We are glad to learn that the circulation of the *Review* has been rapidly increasing of late.

—Dr. Walter Lindley, the physician of the Los Angeles (Cal.) Orphans' Home, says in his report that, in his opinion, "there is no charity in any other part of the world that has cared for children with so small a rate of mortality." Of the 143 children cared for in the four years' work, only one has died, and that was a case of typhoid fever almost moribund on admission.

CORRESPONDENCE.

JENNERIAN VS. BOVINE VIRUS;*

OR, A PLEA FOR THE USE OF HUMANIZED VIRUS.

EIGHTY-SIX years ago Jenner closed his third memoir or inquiry as follows: "May I not congratulate my country and society at large on their beholding in the mild form of cow-pox an antidote that is capable of expelling from the earth a disease which is every hour devouring its victims—a disease that has ever been considered as the severest scourge of the human race?"

Seventy years later, John Simon, medical officer of the Privy Council, testifies as the result of his observation in England and the civilized world, "that the belief which governs the vaccination system, viz., that properly performed infantine vaccination duly renewed at puberty will virtually extinguish small-pox as a fatal disease among such populations as have recourse to it—has rested on so vast a basis of well established facts as not to have needed for scientific completeness that any further facts should corroborate it."

These opinions fully illustrate the hope of each generation since Jenner's day, that our profession would so successfully oppose this great scourge of former times that variola would become a thing of the past. Let us at the present time, when we already hear from various quarters that this disease has begun its annual march and that epidemics in our large cities, despite Health Boards and vaccination will be the order, let us, I say, pause and consider why it is that vaccination has not fulfilled this ardent and reasonable hope.

In selecting this subject for your consideration I have been influenced by a strong conviction that the public ought to be better protected by a more perfect system as to kind and source of vaccination, and by the hope that I may be enabled to point out some errors, and to indicate how we may so amend our system of vaccination that the fondest expectation of its originator may be realized, viz., small-pox as a fatal disease can be extinguished.

To my mind, it is extremely doubtful if the public in this country is now as well protected against the development and spread of the disease, even in large cities where health departments furnish gratuitous vaccination to all-comers, as it was fifteen years ago without them.

This opinion does not rest on mere presumption, nor on the fact that there has never been a prolonged period, either in this or any other country, without its epidemic of small-pox, notwithstanding that vaccination of some kind, performed in some way, has been practised as a compulsory and professional duty.

Going back to the old records we find that from 1750 to 1800, before vaccination came into use, $9\frac{4}{10}$ per cent. of mortality from all diseases in London was due to small-pox.

From 1810 to 1820 it was reduced to $3\frac{3}{10}$ per cent.
" 1830 to 1840 " " " " $2\frac{3}{10}$ "
" 1840 to 1850 " " " " $1\frac{7}{10}$ "
" 1850 to 1860 " " " " $1\frac{3}{10}$ "

Taking the rate of deaths from small-pox during the epidemic in London from 1818 to 1823 only one in every 330 vaccinated people died, while in that of 1877 to '79 one in 28 died. This would seem to indicate that more people were savingly protected in 1818 to 1823 than in 1871 to 1879.

In 1871–72, England boasted that at least 90 per cent. of her population had been vaccinated. Yet there died of small-pox during this epidemic 44,840 persons in England and Wales. There have been three small-pox epidemics in England, each of about two years' duration. The first, '57 to '59, the number of deaths 14,244, the second, '63 to '65, we find 20,059, and finally in '71 and '72 we have the maximum, 44,840.

The Metropolitan Asylum, through its official record, reports that from the autumn of 1876 to November, 1879, 15,171 cases of small-pox were treated in it and the various hospitals of London. Of this number 11,412 had been vaccinated and 3,759 had not; of the whole number of cases 2,677 died; of the vaccinated there were 1,008, and of the unvaccinated 1,669.

The report of Dr. Buchan for the year ending May, 1881, gives a total of 1,532 fatal cases.

In our own country the epidemics that have occurred during the last ten years in the cities of New York, Brooklyn, Chicago, Philadelphia, Paterson, Newark and lastly Montreal seem to attack both vaccinated and unvaccinated alike. In Brooklyn of the 1,068 cases reported in 1871, 408 died. In Paterson the deaths were about one in five. In other places they were from five to twelve in every 100 cases reported.

These facts are not very pleasant for our contemplation, when we remember the preventive power of the original virus, which, according to Dr. Cameron (health officer of Dublin), was but one in 330 of those vaccinated, and one to five in those not vaccinated. There must be a cause; is it due to the degenerate lymph? Has it lost its power through its successive transmissions through the human body?

These are no new questions. They were propounded to Jenner, and, up to the time of his death, humanized virus succeeded admirably in its protective power. In 1858, Dr. Steel, the teacher of vaccination in Liverpool, says, I "am using lymph that was obtained from Jenner, and the vesicles are the same as those obtained by him." Dr. Marson says, "We feel bound to say that the lymph brought into use by Jenner more than fifty years since has to-day the same protective power." Dr. H. Stephen, in 1880, after saying he had examined more vaccinated children than any man alive or who ever lived says, the present arm-to-arm lymph has lost none of its original Jennerial type, and I do not believe that it has lost any of its protective power. Dr. Atlee, of Pennsylvania, testifies that after an experience of sixty-four years with humanized lymph, he has seen no change or loss of power. Seaton and Simon, both claim the same results. I will quote but two authorities in this country: One, the chief apostle of the cause of bovine virus and consequently not the champion of Jennerian succession. Dr. Martin, of Boston, in the *North American Review*, states as the result of thirty-one years of experience with Jennerian vaccination, that "I have never known among those whom I have vaccinated a single case of small pox in any form or modification, except a certain limited number into whose systems the germs of the disease had entered before the time of vaccination, making itself known within fourteen days after the operation." This testimony is all the more valuable when you remember that in the *Boston Journal* of October 20, 1870, this distinguished gentleman says that the humanized virus with which he accomplished such marvelous results was "a continued propagation of the excellent stock of the National Vaccine Institution of London, which I have supplied so many years, this virus being from that first started in use by the hands of Jenner in 1796."

The other reference is to an article in the *New York Medical Record*, April 8, 1882. Dr. Snow, of the Providence Health Board, says: "I have used humanized virus in about 26,000 cases transmitted from arm to arm since the time of Jenner, and I regard its protection as absolutely perfect." If we place credence in these authorities and in the statistical result of their labors, the cause is not here, but can, I think,

* Read before the New Jersey State Homœopathic Medical Society, October 7, 1885.

be found in the fashion of the day, the use of bovine virus. I will not enter into the history of the cultivation of vaccine virus by continued calf-to-calf inoculation. Suffice it to say that previous to 1866 it was practically unknown to the profession, although it had been practised in Italy, where Troja, of Naples, conceived the idea of taking the virus from the arm of a child and vaccinated with this virus a heifer with the result. We endeavored for two years to interest the profession, with very indifferent success. It remained for the famous heifer from Beaugency to revolutionize both public and professional opinion touching animal vaccine. This was in March, 1866. In June, 1870, Dr. H. A. Martin, of Boston, sent his agent to Paris to obtain virus from this source. Depaul supplied him with matter from the 258th, 259th and 260th of his continuous series from the heifer. Since which time 1866 numerous cases of so-called spontaneous cow-pox have been found in various parts of both the Old and the New World, which has been considered somewhat strange, since up to '66 no spontaneous cases had been found since Jenner's time.

Why this change? Not because of the want of protection in the old way. Not because of the greater certainty of the new lymph, for Depaul claimed but 50 per cent. as successful, others from 10 to 50. Dr. Martin says that when time enough is taken the animal virus almost always asks in primary and in 75 per cent. in revaccination, yet if the albumen on the points is not dissolved and fully applied, vaccination will often be futile. Again he says, "my vaccination of infants are successful to a degree fully equal to what I had hoped in view of the well-known difficulty of communicating original cow-pox to the human subject." Dr. Griffin, of Wisconsin, a propagator of bovine virus, says: "cow-pox virus is not so readily absorbed into the human system. My average of failures is about two in ten, and I am satisfied with the result." The French Academy, after several years' trial, found sixty per cent. was the highest rate of success. Dr. Foster, of the Augusta Health Department, gives his experience as follows: "Notwithstanding I have taken the greatest care and followed carefully the direction of propagators, I have failed in about fifty per cent. and in some unsuccessful cases after three attempts with the bovine I have used the humanized and succeeded in every effort." This testimony can, I think, be corroborated by every member of this association.

It is all important that we should give our patients virus of such reliability that will insure prompt, harmless and complete infection of the subject. If we succeed with the bovine, it is quite irregular in its course, taking from seven to fourteen days for its development, while with the humanized, results are obtained in from five to seven—a matter of the greatest importance during an epidemic. Then, as I have shown, the bovine virus fails in from ten to fifty per cent. of all such efforts, while with good Jennerian lymph a vaccinator should not fail of success in his attempts above once in 150 times, as can be shown by the results of Marson, Shepherd, Seaton, Foster, Loines and others.

The claims of the "syphilophobists" have been proved as erroneous. We can find no reliable evidence that syphilis or any kindred disease has ever been communicated through the medium of vaccine lymph. Nor even that vaccine and syphilis have been communicated at the same time. Experiments made with chancrous matter and lymph combined failed to produce a combined action—either one or the other resulted. Dr. Loines, of New York, never saw syphilis communicated, nor did Marson in his 40,000 cases, nor Luse in 40,000, nor West in 26,000, nor Sir William Jenner in 13,000, and none of them believed in this supposed danger.

I urge another objection to the use of bovine virus, viz., the great local disturbance attending the whole course of the vaccination. In a vast number of the vaccinations in the Newark City Dispensary as well as in my private practice, I have observed a great amount of local inflammation with considerable constitutional irritation, particularly seen with infants. The scab of bovine virus rarely falls before the fourth week, frequently leaving behind it a deep foul ulcer, reaching to the tissues beneath, compelling the use of poultices and other topical applications to relieve the pain and promote the healing process. Severe erysipelas, both traumatic and simple, I have seen and found noted in the journals as a frequent result of the use of bovine virus in this country. Dr. Seaton says the most unpleasant complications are frequently found to attend vaccinations with bovine virus in England.

Another objection I would urge is the frequent development of spurious cow-pox, due, I think, in part to the methods used in charging the points, viz., the crusts which have formed over the patches are first removed, the patch is then squeezed between the blades of long dressing forceps and as the lymph oozes out the ivory points or quills are dipped or charged. A patch is squeezed several times before it is said to be exhausted, and consequently it is impossible to prevent its admixture with a certain quantity of blood. When you will remember that from two to five hundred points are charged with virus from each patch, how many can be said to be so charged with true vaccine lymph and how many with the serum of the blood? Again, is this so-called bovine virus true cow-pox such as Jenner used? Does he not call attention to the development of a spurious pox developed in the cow that is nearly or quite identical with that called specific? Did he ever claim it to be a spontaneous disease of the cow? Did he not say that in all cases where it was developed it was preceded by the horse disease and that only when this obtained did we find the true cow-pox; and finally is this the history of the Beaugency disease? Do we obtain the same kind of scar that he declares needed, with its numerous thimble-like depressions on the surface of the cicatrix, or is the scar smooth and without foveation.

During my service as chief health officer of Newark, I have had over one hundred cases of spurious vesicles in primary vaccination brought to my notice by the city vaccinators. In some it was like a split strawberry with the convex surface up. This would last ten to twelve days and dry up without irritation; in others break down into an indolent small ulcer or open sore; in others, a sore with plenty of inflammation but entirely without the characteristics of a vaccine vesicle, and this same result occurring after re-vaccination. When we consider how many persons buy the points from the druggists and vaccinate themselves and that the getting of an irritation is considered a sufficient evidence by them of their protection, this is a matter of the greatest importance.

Again, I object to the use of bovine virus, owing to the slow development of the vaccine vesicle, as I have before stated. I have frequently seen it take from seven to sixteen days for the full development of the vesicle. The misfortune and death liable to result from this delay must be evident to those who have had the least experience in endeavoring to prevent or control small-pox. Usually when we find a case of small-pox; the whole of the household have been exposed, and if vaccinated at once with virus which will promptly infect them, a large number of them will be saved from the fatal disease.

Marson says, "Suppose an unvaccinated person to inhale the germs of variola on Monday; if he be vaccinated as late

as the following Wednesday the vaccination will be in time to prevent small-pox being developed; if it be put off until Thursday the small-pox will appear but will be modified; if vaccination be put off until Friday it will be of no use. It will not have had time to reach the stage of variola, the index of safety, before the illness of small-pox begins. This we have seen over and over again and know it to be the exact state of the question." Who is there among us that has acted upon this direction but what can attest the truth of Marson's assertion, provided virus that will develop a full vaccine vesicle within ten days, be used? Humanized virus, as has been shown, rarely delays vaccinal results. Bovine virus usually is tardy and frequently uncertain. In this important field of practice the great certainty of humanized virus gives it another high advantage over bovine virus.

I object to its general use, for, as Foster says, "we surrender our personal care and supervision of the propagator of vaccine virus, and thus place our reputation and the health and lives of our patients in the hands of men who are solely interested in the dollars and cents involved in the transaction.

What, then, are the special advantages of bovine cultivation and vaccination? I know of but one. In times when small-pox is epidemic large quantities of lymph may be furnished at short notice. On the other hand, let us review the disadvantage already enumerated.

1. Bovine lymph often fails on first trial, even in the hands of the best vaccinators.

2. It is irregular and generally tardy in its period of incubation.

3. It is often extremely difficult to tell from an inspection of the vesicle whether it is genuine (efficient) or not.

4. The local effects are as a rule severe, so severe, in fact, that one would be bold indeed who would make four insertions in young infants as Louis has recommended.

5. Owing to the depth of its action and the slough which I have shown so often follows its use, even the cicatrix does not afford definite information; as it does not under these circumstances show characteristic foveations, the extensive inflammation and induration, what we so often see around the bovine vesicle, is no indication of its efficiency. On the contrary, it is a positive evil, being simply a mild septic poison made manifest, and doubtless often of no protective value.

7. Statistics show that since the introduction of bovine virus the epidemics of small-pox are more frequent and that the death-rate from small-pox is steadily increasing, notwithstanding greater numbers are vaccinated now than ever before.

F. B. MANDEVILLE, M.D.,
NEWARK, N. J. *Chief Health Officer.*

EXHAUSTION OF NERVOUS ENERGY.

NERVE exhaustion, neurasthenia and nerve prostration are terms which are used by both the profession and public generally in discussing conditions now frequently met among those classes the members of which are not physical laborers. There is great latitude in the manifestations or symptoms of these conditions, but when carefully analyzed they are found to be due to a lack of nerve power—that is, exhaustion of nervous energy. This must be due to one of two causes—or, as is more generally the case, I think, to a combination of the two. Either there has been an excessive demand made on the nervous energies or there has been a lack in production. Certain it is there has been energy expended so rapidly that an accumulation has not taken place. The nervous system has a capacity for storing energy just as the dome of a boiler has for storing steam, and as the boiler must keep up the store of steam in order that the engine may be driven, so, too, the organs concerned in the production of energy in the economy must keep up the stores of nerve energy which run the engines that drive the machinery of the body. This stored energy or nerve force is a provision in nature and is absolutely essential to the proper healthy action of the system.

As steam is made from fuel, air and water, so too is nerve energy produced from food, air and water introduced into the body. And although it is necessary to produce steam that there be fuel, air and water, these are not sufficient until changes have been effected in them. The oxygen of the air must combine with the fuel and set its latent energy free, and this energy must enter the water and convert it into steam. It is likewise just as true that it is not sufficient that food is eaten, water drank and air inhaled. Changes must be wrought in them whereby they are converted into living tissues and their latent energies become the vital forces and the peculiar form of energy we call nervous energy.

The processes by which food materials are prepared outside the body, by nature and by man, cannot be discussed here, though they have an important bearing on the subject. But I may say they have a striking analogy in the processes of elaboration through which these materials are carried forward in the economy to be converted into the tissues of the body and their latent energies into vital and nervous energies. Neither will I trace the food through its several stages of change, save to mention them in order to an understanding of the methods by which nerve energy is produced. These changes should begin with the introduction of food into the mouth, and end only when it becomes living tissues and vital energy. Between the beginning and the end there are many steps and stages of the refining process, all of which are essential that the food may reach the destined end appointed. Motion is necessary to all these stages of change. The functions of the several organs in the processes of change are not only dependent on muscle movements and contractility in themselves, but also on the movements of the parts round about. Without the motion of the jaws the teeth would not grind the food, nor would the saliva be secreted and mixed with the mass. A muscle movement is necessary to carry the masticated food to the stomach. It is necessary that the stomach constantly roll and turn the mass over to mix the juices with it as well as to bring fresh portions into contact with the nerves of the stomach, and thus excite additional secretion. As in mastication, the muscle movement in the stomach greatly augments the secretion of gastric fluid. Digestion in the stomach and intestines is facilitated by those movements and positions of the body which alternately bring pressure to bear on them and remove it, thus causing them to slip and slide and glide one upon the other and upon the surrounding parts. It may be positively stated, in fact, that there is no perfect digestion without the aid of these movements. The stomach must have motion communicated from outside itself in order to complete its work, particularly towards the end of the process. After the first stages of digestion the stomach muscles relax and become quiescent, and if motion and pressure are not supplied from without, the mass of partially digested food tends to remain instead of being absorbed or passed out of the stomach into the intestines.

What I have just said of the stomach is also true of the intestines. Beside the peristaltic motion, caused by the contraction of the muscle coats, the mass is urged along by pressure from the surrounding parts, and in its passage through the canal it excites secretion of the several intestinal digestive fluids, just as its presence in the mouth excites secretion of saliva, and its presence in the stomach the secretion of the gastric juice.

The bile and pancreatic juice are the more important of these intestinal fluids. The liver and pancreas extract or manufacture these agents from the blood. Therefore it is necessary that the blood be actively circulated through these organs as well as through the stomach and intestines. This circulation is immeasurably aided by two forces, viz. : the pumping effect of the motion in the chest, which is kept up by muscle contraction, and the motion and pressure of the organs and tissues in which the blood vessels lie. When these two forces are partially suspended, a condition of blood stasis or passive congestion ensues, which impedes or suspends activities in these organs. The liver, beside eliminating the bile, which is both an excretion and an aid to digestion, effects changes in the food materials which are essential to the preparation of these materials for use in the economy. In these actions it is vastly aided by the motion communicated by the organs and parts round about —indeed, it is so dependent on these aids that it becomes engorged and torpid so soon as they are removed. It is readily apparent to everyone how necessary are the motions of the chest walls to the functional activity of the lungs. It is by lifting the ribs and lowering the diaphragm that the chest cavity is expanded and air inhaled, and it is by the relaxing of these muscles and consequent contraction of the chest that the air is exhaled. Not only do these motions of the chest effect respiration, they are also important factors in the venous circulation, particularly in the cavities of the body ; even the heart's action is materially affected by these motions of the chest wall. The muscular contractions of the heart and the contractions of the elastic arteries are forces sufficient for the arterial circulation, but unaided by the movements and positions of the body they cannot long overcome the obstacles to the return or venous circulation that are met with in the upright posture.

Having seen how the food is elaborated and converted into tissues and energies of the body by means of motions in the several organs, we can understand how the absence of any of these motions which are necessary in the evolution of the food materials would result in lack of nervous energy. In those cases where there is a lack of production, the cause may be sought in these organs and glands. It will generally be found that they do not perform their functions on account of absence of motion—that is, movements in themselves and motion communicated to them by the organs and tissues in proximity. The nerve centers—that is the brain and spinal cord—may be compared to a king, and the organs and tissues engaged in the production of energy to his subjects. When the subjects fail to work and pay tribute to the king, he suffers. They may be also compared to an engine which, having received its power from the various organs, distributes or uses it for the purpose of driving the machinery of these same organs. When there is lack of nervous energy, the cause may also be looked for in misuse or abuse of these forces. While the stomach, liver, lungs, etc., elaborate the food from which the nervous energies are manufactured, it is also true that the nerve system returns much of the energies thus produced to these organs for the purpose of stimulating them to do their work. Therefore, it not infrequently happens that nervous force is excessively used and consequently exhausted on these organs. The secretion of gastric juice and the movements of the stomach are the direct result of the expenditure of nervous force on the glands and muscles of the stomach. The secretion or elimination of bile and the manufacture of sugar and other functional activity of the liver are the result of nervous energy expended on it. So that if the stomach be overtaxed or given more work to do than is normal, there is an unusual demand made on the nerve centres for this force and an excessive quantity is used. So it is if the liver is overcharged with materials for its elaboration, and so on through the entire system. All mental and emotional operations require for their instigation and maintenance this same nervous force. Undue mental and emotional activity is a frequent and powerful source of exhaustion of nervous energy. Everyone knows, who has been called on to perform an unusual amount of mental work, how utterly exhausting it becomes. Excessive emotional activity, as is also generally known, is a very common cause of great prostration. Stimulants of whatsoever kind, when taken, extract this nervous power by inducing an unnatural and excessive expenditure. The lethargy and inaction following a period of excitement and unusual activity caused by the use of stimulants is a positive indication of the exhaustive nature of these stimulants. Sleep is the most perfect rest or cessation in expenditure of nervous energy, therefore it is a most fruitful restorer. While asleep, the expenditure being reduced to a minimum the finer and more subtle processes of making nervous energy go on, and the stores are replenished. Therefore, we would conclude that insomnia or sleeplessness and habits that deprive one of the necessary amount of sleep would surely result in nervous exhaustion. Excessive and long-continued use of any part tends to exhaustion of the nerve force which is required for its action. Every organ and tissue in the body, in order for perfect development and function, needs to have its periods of activity and rest. Without the periods of rest, activity becomes very exhaustive, and without the periods of activity the function of the part is lost. The first may be proven by holding the arm up at right angles to the body for a few minutes without allowing the muscles that support it to relax. The second is seen in the non-use of muscles, in that their function or power is very much diminished. During the period of activity the incentive to nutrition is produced, and during the succeeding periods of rest or inaction, fresh blood flows in and the nutritive act is accomplished. This is seen in its largest field of operation in periods of waking and sleeping, and in its smallest is illustrated in the heart's action, that is, in its periods of contraction and relaxation or rest. Where there is paralysis or loss of power it is, in the vast majority of cases, due to a lack of nervous energy or stimulant to the paralyzed parts. After a muscle will no longer respond to voluntary efforts, stimulants, such as pricking or electricity applied, will cause contractions. In many cases of dyspepsia, constipation, liver and kidney difficulties, etc., the cause is to be found in this, viz. : that the supply of nervous energy is no longer sufficient to drive these organs to do their work. Thus it is apparent that the economy of the system is like a re-acting machine. If the nervous energies are below par, the working capacity of the organs and tissues concerned in the production of energy are correspondingly diminished, and *vice versa*, when the functional activities of these organs are below normal, the stores of nervous energy are not replenished. In other words, a sort of vicious circle is formed which is typified in what an old lady once said to a patient who was troubled with profuse perspiration. Said she : "You will not get stronger till you stop perspiring, and you will not stop perspiring until you get stronger." This seems to be a dilemma from which there could be no hope of escape—and in many cases there is none, as in extreme cases of paralysis, locomotor ataxia, rheumatism, etc. ; but even in these cases there was a time at which a remedy could have been had by first stopping the expenditure of energy, or reducing it to a minimum, and then increasing the energy-producing capacity of the organs and tissues. The first can be accomplished by discontinuing work, use of stimulants, or whatever else that causes an excessive demand on the stores of nerve energy. The latter can be accomplished by applying to both organs and tissues motion ; that is, motion

from without the body that would not require expenditure of any or but little of the nervous force in the economy and which would result in effects similar to, if not identical with, those produced by activities induced by expenditures of nervous energy.

In these cases of exhaustion of nervous energy, or cases in which the stores of energy are not sufficient for the demands, the question comes up as to how the supply can be increased. Should the patient follow the miser's plan and hoard his energies; or would it be better to invest them as the prudent business man does his money? In those methods of treatment which consist of rest absolute, they have followed the former plan with results as dubious. The miser stints himself and adds but little to his store, or, being compelled to spend some of his capital to maintain life, he often grows poorer. It can be said, in support of these systems of treatment, that they do cut off many of the expenditures which do not bring results that are profitable to the economy; as, for instance, mental and emotional activities, also some forms of muscular action in which there is continual strain and expenditure without periods of relaxation, and consequently no nutrition, no aid to energy-production. As systems of treatment, however, they are negative rather than otherwise, and can never add anything to the energy-producing capacity of the patients. They are methods of retrenchment simply, and when used in connection with a treatment which adds to the energy-producing powers of the body they are to be commended.

As a clock that is almost run down can be stopped and thus saved from running quite down but cannot be restored again by simply letting it stand still, so with cases of exhaustion of nervous energy. The progress of the trouble can be arrested by stopping the expenditure, but the patients cannot be restored to health by letting them stand still. In my experience with cases of this class I have sometimes had a good deal of difficulty in getting patients to stop expenditures sufficiently. The demands of business, of society and of family and friends were such that they really expended their energy as fast as it was produced, even with the aid of the treatment. I have seen a few cases in which it seemed necessary that the patients should give up all occupation for a time; for so soon as they began to get better or feel better they took on more work, expended their energies in mental and emotional directions, and consequently they kept themselves at just about a standstill.

It seems to me the very best thing to do in these cases is what the prudent and successful business man does, viz., cut off all expenditures in those directions from which there is no profitable return and direct expenditures only into those channels from which not only are equivalent but profit also is had. But having cut off all profitless and exhaustive expenditures, the matter of directing and regulating those which are to prove beneficial is not an easy one. In fact, the opposite extreme from the absolute rest treatment is frequently the mistake made.

Although exercise has been very generally prescribed by both the profession and laity, there has been very little intelligent comprehension and application of it as a means of curing the sick. A very common prescription is that the patient shall walk and the not unusual result of walking is that the patient is made worse. Do you ask why? Simply because it is an expenditure of nerve energy through a channel from which there is no profitable return. The muscles involved in walking are not connected with the energy-producing organs, and exercise of these muscles does not usually communicate motion to those organs. Consequently energy expended on them is, in large measure, like that spent on mental and emotional operations, a profitless expense. In walking, as in standing, there are muscles which are put on a strain or state of constant contraction which causes much exhaustion, for the reason, as I have explained, that there are no periods of relaxation and rest in which the fresh blood can flow in and the act of nutrition or renewal take place. Besides, under such conditions, the abdominal and pelvic organs are heavy from the accummulations of blood and the supports are weak from lack of nerve stimulant and nutritive activity, so that in walking these organs are jolted down and displaced, giving rise to further obstructions to venous circulation and many distressing derangements. Various kinds of gymnastic exercises are prescribed in which the muscles of the arms and legs are chiefly involved. The result is generally that more energy is spent on these muscles than is produced from the activities induced by the exercise. Patients who have this sort of treatment prescribed very soon become discouraged because they find that it makes them worse, so they condemn exercise as not being the kind of treatment they need. Not only the kind but the amount of exercise or motion determines its value as a therapeutic means. A certain amount of the right kind will prove beneficial to a patient, whereas an amount in excess of this will be positively injurious. The proper amount causes an increase in both the local and general circulation and induces nutrition, but if that amount is exceeded equilibrium is lost, and the energies so reduced that reaction which should follow immediately after does not take place. The same thing is experienced in the matter of cold baths. If after a cold bath there is prompt reaction the system is invigorated by it, but if reaction is slow the effect is exhaustive.

Motion or exercise prescribed for an invalid suffering from exhaustion of nervous energy, must not only induce activity in the muscles and parts involved in the movements, but also superinduce activities in those organs, located in the cavities of the body, whose function it is to elaborate materials from which the energies are derived. The reason why horse-back exercise or motion has been found beneficial in some cases is that the motion is communicated to these central organs. But for those who are very weak from exhaustion of energies even this exercise is too severe and proves hurtful. The same is true of the motion of carriages and cars. Some have found sea-voyaging beneficial, doubtless on account of the motion which the ship communicates to the body, while others have been made worse by it, because of the severity of the motion.

The portal system of veins, which take up the blood from the stomach, intestines and other abdominal viscera and carry it to and partly through the liver, have a capacity equal to nearly all the blood normally contained in the body. In many of the cases under consideration this system becomes engorged so that other parts of the body are almost depleted and suffer from lack of blood. The effect of motion when carefully applied to this region is to re-establish the normal flow through these veins and send the blood out into the general circulation to supply the anæmic parts.

My method of applying motion is by means of several specially devised machines which are adjusted or adjustable to all parts of the body. The motion is given gently or vigorously as may seem judicious, but always agreeably. A machine with adjustable rubber pads vibrating at a rate of some 1,300 per minute is applied to the abdomen, chest and fleshy parts, and a vibrating motion is communicated to and through the organs and tissues. Other machines communicate a slow, kneading motion to the abdomen which is transmitted to the organs and facilitates all the functional activities, urges the

blood and other fluids as well as the food materials, digested and refuse, through their several channels. An oscillating motion is given the extremities by means of still other machines designed for the purpose. While the varied motions each and severally are being applied the patient is perfectly quiescent, usually in a recumbent posture, so that the least possible of the bodily energies is used or extracted. Another condition commonly present in this class of cases is inequality or loss of equilibrium in the circulation. The venous or return circulation is so defective in the lower parts of the body that it reacts on the capillary and arterial circulations. This causes the heart to increase the frequency and force of its contractions in its efforts to overcome the obstructions. But these obstructions being in the lower parts and not in the head, the effect of the increased action of the heart is to send the blood in excessive quantity to the brain. The result is many head and brain disorders, as, for instance, headache, insomnia, visual derangements and others. This I remedy in part and sometimes entirely by putting the patient in a position of more or less inversion. By the aid of a chair which I have devised for this purpose I can, with utmost facility and comfort to patient, succeed in reversing the attitude. Beginning gradually according to patient's ability I am in a few days able to invert the body to an angle of 45 degrees or more. The effect is immediate on the heart's action, slowing it from five to thirty beats per minute. The extremities grow warm even while in the inverted attitude. By repeating this operatian daily for a time, equilibrium in the circulation is restored ; the cold extremities and hot head and the brain symptoms are permanently relieved.

FILLMORE MOORE, M.D.

201 W. 44th Street,
NEW YORK, Oct. 20th, 1885.

A SMALL-POX REMEDY.

I WOULD again draw the attention of physicians to the value of sulpho-cyan-allyl (the volatile oil of black mustard) as a remedy in small-pox. I first introduced it to the notice of the profession in 1873 by several original trials, and an incidental explanation of its *modus operandi* when speaking of excretory products generally [See pages 59 and 79, *Medical Union* of that year.] I have since had additional opportunities to test its value and hesitate not to compare its specific importance to that of quinine in ague. It modifies the virulence of the disease—prevents pitting, often confining an attack to mere subjective symptoms. In cases of repercussion, nothing equals its action for re-establishing a *status activus*. Ptyalism or a urinary crisis after its exhibition, indicates either a reduction of quantity or a remission of frequency in its administration. As a prophylactic it may even take the place of vaccination, when the latter is too late after an exposure.

The formula is :

℞ Olei sinapis nigri ætherei.....gtts X
Alcoholis absoluti.....gtts M
Fiat solutio

S. One drop in a little milk or some gum-arabic water, every two or three hours.

FRANK A. ROCKWITH.

EAST SAGINAW, MICH.

OUR LONDON LETTER.

To the Editors of the N. Y. Medical Times :

THE holiday season is rapidly drawing to a close. The medical schools commence work at the beginning of October, and students and teachers are now in their places. The different medical societies commence their meetings for the new session (1885-1886) at the same time. The annual meeting of the British Homœopaths, which usually takes place in the middle of September, was held later this year, on the 26th. The attendance was moderately good, but neither Birmingham nor Manchester was represented, but the Scotch and the Irish Homœopaths failed to appear. We were glad to have among us Dr. S. Lilienthal (who made special journey from Paris to be present) and to find him, as Dr. Hughes remarked at the dinner, "quite a boy," for all his many years of hard work. It was a disappointment not to have the Drs. Dake and Dr. Morse as well, but Dr. Dake, who, with the others, was also disappointed, wrote a letter to explain.

The Norwich Congress will be memorable in the history of Congresses for two things—the admirable arrangements made for our comfort and enjoyment by our hosts, the Drs. Roche (*père et fils*), and for the presence of an allopathic physician among the guests at the dinner. Nothing could have been more perfect than the provision made for the entertainment of the visitors. On the day of the Congress, when the business of the day was over, the most noteworthy features of the ancient Capital of East Anglia were inspected under the guidance of Dr. E. B. Roche (*fils*), who had the chief share in making the arrangements. On the morning after the Congress the celebrated "Norfold Broads" were visited and the unique river and lake scenery they afford seen to great advantage. At the Congress dinner, Dr. Shephard Taylor, physician to the Norfolk and Norwich Hospital, a personal friend of the President, Dr. Nankivell, accepted the latter's invitation to be present and thereby set an example to others of his school in courage and liberality, which they would do well to follow. In the toast of "our guests," Dr. Lilienthal and Dr. Shephard Taylor were specially included in a graceful speech by Dr. Hughes ; the toast was received with great enthusiasm and both Dr. Lilienthal and Dr. Shephard Taylor replied.

Dr. Nankivell made an admirable president and his address was decidedly above the average of presidential addresses. He took a comprehensive view of therapeutics, showing the relative position of homœopathy in regard to anti-pathy, allopathy and empiricism, and showed how the latest old school works prove the impossibility of teachers of therapeutics ignoring the homœopathic practice. These works are full of it, though they are careful to be silent as to whence they obtained it. He quotes Dr. Brunton's new book as a signal example. The address was somewhat *couleur de rose* in the anticipations for the future, but it is better to err in this direction than in the opposite.

At the Congress Dr. Dudgeon exhibited a copy of his edition of Ameke's History of Homœopathy, which is just out of the printer's hands. I was able to look over it rapidly, and I can truly say that I have seldom opened a book more full of interest. It would be interesting for anyone to read, lay or medicine, but to homœopathists it is doubly interesting. Dr. Dudgeon has enriched the volume by adding a complete index, which the original lacked, a preface, a few notes and headings to the pages. The translation was done by Dr. Alfred Drysdale but revised by Dr. Dudgeon. The work is the property of the British Homœopathic Society and it is published for the Society by Gould of Moorgate Street. It should find eager purchasers wherever the English language is spoken.

Another newly published work was shown at the Congress by your correspondent. It is called "The Prescriber, a Dictionary of the New Therapeutics," and was written chiefly for those beginning the practice of homœopathy. Boericke

is the American publisher, and an early copy will be sent to you.

To-night the first meeting of the British Homœopathic Society of the season took place, Dr. Mackechnie, the President, in the Chair There was a good attendance. The paper was read by your correspondent and was entitled *Lathyrus in Spinal Paralysis*. Cases illustrating the action of this drug were narrated, and in the discussion which followed the virtues of agaricus, conium, and gelsemium were spoken of by several members.

Yours fraternally, JOHN H. CLARKE, M.D.

15 St. George's Terrace,
London, S. W., October 1, 1885.

TRANSLATIONS, GLEANINGS, ETC.

EXTIRPATION OF THE LUNG.—Dr. Domenico Biondi, of Naples, some time since proved that animals recovered after removal by operation, of one entire lung. In a more recent communication, published in the *Wiener Medizinische Jahrbucher*, the same physician shows that animals may survive the removal of portions of lung artificially infected with tubercle. After injecting, by Ehrlich's method, masses of bacillus tuberculosis into the parenchyma of the lung, so that the clinical and anatomical symptoms of tubercle were produced, he removed, at the end of a few weeks the diseased lung; and in all cases recovery was complete. Whether pulmonary tubercle in man, not artificially produced, could be precisely diagnosed and localized to one lung, and then treated in the same manner, and whether total removal of the organ or excision of a diseased lobe would be in such a case, the less perilous operation, are questions which can hardly be decided by the physicians and surgeons of to-day; yet bearing in mind the surgical procedures, performed with success almost daily in this country, that were once considered impossible, and then unjustifiable, it is hardly unreasonable to believe that excision of the lung is an operation of the distant, if not of the immediate future.—*British Medical Journal.*

WATER FOR INFANTS.—A physician of the New York Nursery and Child's Hospital believes, from his practice, that infants generally, whether brought up at the breast or artificially, are not supplied with sufficient water, the fluid portion of their food being quickly taken up, and leaving the solid too thick to be easily digested. In warm, dry weather, healthy babies will take water every hour with advantage, and their frequent fretfulness and rise of temperature is often directly due to their not having it. A free supply of water, and restricting the frequency of nursing, has been found at the nursery to be a most effectual check in cases of incipient fever, a diminished rate of mortality and marked reduction in the number of gastric and intestinal complaints being attributed to this cause. In teeth-cutting, water soothes the gums, and frequently stops the fretting and restlessness universal in children at this period.

APOMORPHINE FOR ALCOHOL POISONING.—Dr. Ensor, District Surgeon at Port Elizabeth, in a letter to the *Port Elizabeth Telegraph*, relates a case of alcohol poisoning successfully treated by the subcutaneous injection of one-fifth of a grain of apomorphia, which he states is interesting as an instance of life saved by the prompt administration of a new remedy for narcotic poisoning, especially when insensibility is too complete for the administration of an antidote by the usual route.

CIGAR MAKERS' CRAMP.—Dr. Torino describes a condition of tetanic spasm and pain, occurring in persons employed rolling cigars, and which in its gradual onset a general progress shows a marked resemblance to ordinary writer's cramp, with the difference of the muscles affected. In a well-marked instance, the patient was unable to go through the manipulations of cigar-making more than twice or thrice, without producing pain situated in the left wrist and the back of the left thumb, index, and little fingers, while at the same time the last-named was forcibly extended by a tetanic spasm, and the thumb and index finger so strongly separated that they could not be brought together. The cause of the extension was shown to be a spasm of the extensors, and not a paralysis of the flexors; for when the attack passed off, the latter were quite normal in their action. The right hand was not affected. In analyzing the manual movements of cigar-making, Dr. Torino finds that the left hand is used much more than the right, and he calculates that during nine years of 290 days in the year, the particular movements concerned in the production of the painful tetanus must have been performed 2,470,500 times.—*London Medical Record.*

CIGAR SMOKING AND CANCER.—While all who read the newspapers in any country must have learned, with regret, that the gallant general who saved his country from disunion, and guided its destinies for so many years, is suffering from a painful and deadly malady, it is very advisable that capital should not be made by a certain party out of the alleged cause of his illness. It has been distinctly reported in several journals that General Grant is suffering from cancer of the tongue caused by smoking. A little knowledge of pathology is sufficient to demonstrate that smoking cannot cause cancer, although the irritation of the pipe sometimes sets up ulceration of the lip, which, when of very long standing may become cancerous, provided that the patient has a hereditary tendency to cancer. There is no evidence whatever that cigar-smoking causes cancer of the tongue. Mr. Butlin, the author of some recent observations and statistics on cancer of the tongue, has shown that the proportion of men to women suffering from that disease is nearly six to one, but that it occurs in men who neither drink nor smoke, whilst it is as rare among women of the most masculine habits as among other females. Even the irritation of a broken or decaying tooth can only be an occasional exciting cause, since this condition is as common among women as among men, while cancer of the tongue is fortunately, rare, out of all proportion to cases of decayed teeth. There can be no doubt that a man with a tooth irritating his tongue ought to have it removed. It is equally certain that no smoker with a sore on his tongue ought to persist in the use of tobacco until that sore is cured. But the risk of cancer through smoking is so infinitesimal as to be perfectly useless as an argument for the anti-tobacconists.—*British Medical Journal*, March 14, 1885.

DISINFECTION OF VACCINE LANCETS.—Dr. William Fearnley writes to the *British Medical Journal*, July 11, that for the past three years he has not had a single "bad" arm after vaccination, and he attributes it to sterilizing the lancet by heating it in the flame of a match to dull redness immediately before the operation. As soon as the lancet is hot he wipes it to get away the charred mass, if any; then when he can bear the blade with comfort against his cheek, he operates on the arm in the usual way. Before adopting this process an arm now and then would be angry and inflamed, now he never sees hardly a blush on any arm. The thing is simple, because every house contains the means (lucifer matches) of thorough disinfection.

THE ACTION OF PARALDEHYDE.—Dr. S. A. K. Strahan, in the *Lancet*, January 31, 1885, thus sums up all that can be said in favor of this drug. It is an equally sure hypnotic with chloral, it does not in any case produce excitement before sleep, it leaves no headache nor other unpleasant symptoms on awaking, and it does not affect the appetite. These are all matters of not slight importance, but there is one advantage which this drug possesses over chloral which at once gives it a place among our most useful hypnotics, and that is the absence of any depressing or paralyzing action on the heart. This absence of action upon the cardiac centre permits of its being given with perfect safety to general paralytics and others to whom chloral would only be given with the greatest caution and with constant anxiety as to the result of even small doses. The new drug may not take the place of chloral in every-day prescribing, but it must supplant it in those unhappily numerous cases in which the action of the sedative upon the heart is to be feared, and yet where sleep is often so much to be desired. I have given paraldehyde in a few cases of facial neuralgia. In two cases it acted like a charm, while in all the others its effects were *nil*. I have also found it useful in a case of "nervous headache."

MORTALITY AMONG CHILDREN.—The fearful mortality among children during the summer months is due, in my opinion, to the fact that the little ones are not placed in a position to gratify their natural desires, and mainly from the fact that they are deprived of the use of cold water. Children, during the extreme hot weather, perspire freely. This would be caused by the extreme heat; but they are often, against their will, kept sweltering in flannel garments, which increase their heat and perspiration, and they are consequently very thirsty. If the child cries for drink, the nipple of the nursing bottle is thrust into its mouth. The child is thirsty, not hungry; but not getting the water which it does want, it takes milk, of which its stomach is already full. The consequence is, the milk not being digested, ferments; and vomiting, diarrhœa, cholera morbus and death result.—*Journal Am. Med. Ass'n.*, March 28, 1885.

NEW AND SUCCESSFUL TREATMENT FOR TAPE WORM.—Under the above title, Dr. Howard Pinkney, writing from Sharon Springs to the *Medical Record*, describes his experience with the oil of the pine needle, made from the *pinus punilio*. A hall boy of the hotel had suffered for five years from tapeworm. He had been treated for four years in New York, but had never succeeded in getting rid of over four feet of links at a time. Dr. Pinkney, not being able to get any male fern, pelletierine, or pumpkin seeds, therefore tried the following experiment: The patient fasted from breakfast, and at 9 P. M. he was given one teaspoonful of the oil of pine needle in half a glass of milk. The following morning, as there was no perceptible action of the medicine, the dose was doubled. This, the boy said, had a more agreeable taste. One hour later, he took a dose of castor oil, and in the course of two hours after this he passed an entire tænia solium measuring fifteen feet six inches in length, and one-half inch at its broadest part, gradually tapering down to almost a thread. To make sure that none remained behind, he was given two teaspoonfuls more, but no sign of any worm or part thereof passed. "This oil," writes Dr. Pinkney, "contains no turpentine, is fragrant in its odor, and, when mixed with milk, very agreeable to the taste. It produces no strangury, tenesmus or other unpleasant or distressing symptoms. The patient can generally pursue his ordinary avocation."

SCALDED OATMEAL IN THE AFTER TREATMENT OF SCARLET FEVER.—Dr. George Smith thus writes in the *Bristol Medico-Chirurgical Journal*, December, 1884:

As the heading of this note implies, it is intended here to treat of the subject of the desquamation which follows every case of scarlet fever, however slight, both in regard to its bearings on the patient himself, and also those with whom many cast-off particles may come into contact.

Take first the process of desquamation. This, as we all know, varies very much in different individuals, and sometimes it is done by particles so fine as to be hardly perceptible; and these are, I think, a very frequent and most certain source of contagion, by means of clothes and otherwise, much more so, indeed, than the scales as ordinarily thrown off; and I may here state that it is within my own knowledge that the contagion has been thus carried from one house to another, more than a hundred miles apart, at the end of at least a year from the attack.

Now, to obviate this danger, I have for several years been in the habit of having my patients sponged over the whole surface of their bodies twice a day—commencing, as a rule, about a week from the appearance of the eruption, and continuing the process until the desquamation is complete—with a mixture of one ounce of oatmeal to one pint of boiling water; the solution is to be made fresh every day and used tepid, or at such a temperature as may be comfortably borne by the back of a finger.

My reason for using this particular combination is, that the gluten in it sticks the scales to each other and to the surface of the body, thus allowing of their being removed from one sponging to another, without the ordinary risk of infecting either atmosphere or clothes, and greatly lessening the risk of spreading the disease.

Secondly, this same gluten fills up the cracks of the new skin and protects it from cold, as, patch after patch, it becomes bare, and thus, to say the least, greatly lessens the risk of the dropsy which so often follows upon this disease.

GLYCERINE IN FEVERS.—A palatable and promptly beneficial febrifuge is a desideratum, felt more particularly, perhaps, in pediatrics than in general practice. Children are peculiarly susceptible to disturbing causes, and the degree of fever is not always in their case the important indication which it is in the case of the adult. The cause of a very high degree of fever may be, in itself, so insignificant as scarcely to warrant the careful search therefor which would be necessary in undertaking the treatment of a similar elevation of temperature in the adult. It is usually quite justifiable in the fevers of children to address the remedies to the symptoms, unless, indeed, their persistence under such treatment should make a deeper scrutiny for the cause imperative. But whether the cause be first determined or not, the febrifuge employed should be of such a nature as not to depress the vital forces, as some of the more common agents of this class are apt to do. As an effort at supplying an agent of the class required Dr. Mariano Semmola (*Allg. Med. Cent. Zeitung*) recommends the use of glycerine, which he prescribes in the following formula:

℞. Glycerinæ ..... ℥i.
Acidi citrici (*vel* tartarici) ..... ʒss.
Aquæ ..... ℥vi.
M. Sig.—One or two tablespoonfuls every half hour. This is for an adult.

Dr. Semmola has employed this mixture with profit in typhoid fever. In most cases its use was followed by a decrease in the amount of the urea excreted, of from ninety to one hundred grains.—*Therap. Gaz.*

MISCELLANY.

—Professor Bartholow states that he has better results from the combination of potassium bromide and digitalis in the spermatorrhœa of plethora than any other remedies.

—Deaths from cholera are so numerous in Spain that in some places scores die without medical aid, and in others, patients are put in the coffin with unseemly haste. At Altea a young woman who had only been married three months was brought to the morgue; the next morning some one knocked at her house, and when the husband opened the door he found his wife confronting him. At Madrid a similar case occurred. A young girl was placed in a coffin a supposed corpse, but a few hours later she sat up in the coffin and recovered.

—A correspondent of the *North Carolina Medical Journal* reports an interesting case in which the secretion of milk was greatly stimulated by eating oranges. To test the effect, the fruit was omitted for a few days, when the secretion ceased. It was soon brought on, however, by a return to this fruit diet. If at any time the flow be not free, one or two oranges will increase it very abundantly in an hour or two. Previous to using the oranges, the patient gave no milk and the child was fed artificially.

REMOVALS.—Dr. W. Storm White has removed to 413 W. 23d Street, where he will devote himself especially to pathology, urinary analysis, etc., and will also hold himself in readiness to make post-mortem examinations when required.—Dr. F. H. Boynton has withdrawn from general practice and will devote his whole attention to diseases of the eye and ear, at his office, 30 W. 33d Street.—Dr. W. A. Dewey has removed to Petaluma, Cal.—Dr. A. B. Norton has removed to 107 W. 34th Street. Specialty, diseases of the eye and ear.—Dr. J. M. Winslow has located at Cold Spring, Putnam Co., New York.

—The habit of drinking *liquers* such as absinthe, etc., is said to be greatly on the increase in this country. A continued use of absinthe, as is well known to the profession, occasions disturbance of the cerebral functions, degradation of the mental and physical powers, convulsions and even death. The influence of these enticing drinks should be appreciated by the profession at least, and the practice of taking them should be broken if possible. The statistics indicate that there is a steady increase in the use of strong spirits as well as of the lighter beverages in European countries. In Holland the use of spirits has increased 30 per cent. within seventeen years; in Belgium it has doubled itself in the last forty years, and in France it has risen from an average of four annual litres per head to seven in the two decades from 1860 to 1880, *i.e.*, an increase of 70 per cent. In Prussia, between 1865 and 1880, the consumption of spirits rose from eight to ten litres per head, while that of beer rose from thirty-seven to eighty-eight litres. Vermuth, a mixture of eighteen or more ingredients, among which are wormwood, cinnamon, orange, quassia, coriander, galangal, etc., is also a fascinating popular drink, greatly on the increase, of course injurious, and should be tabooed by the profession.

—Little drops of water,
Several grains of milk,
Make a little doctor
Of the Homœopathic ilk.
—*Medical Record.*

Many grains of guess-work
Over a spirit lamp
Boils a pompous doctor
Of the Allopathic stamp.

—"Urethan, the new hypnotic, forms white crystals, easily soluble in water, inodorous, and of a not disagreeable taste, reminding one of saltpetre. Dr. von Jaksch, after having made several experiments on rabbits, administered urethan 110 times in twenty different cases, and found that even half a gramme of it to one kilogramme of body weight produced no toxic effects. Doses of 0.25 to 0.5 gramme had either no perceptibly soporific effects whatever, or only after repeated administrations: doses of one gramme, however, never failed to produce sleep. Urethan principally acts upon the brain, without perceptibly influencing the excitability of the peripheral sensitive apparatus; hence, as the author concludes from his observations, it proves ineffective to allay the harrassing cough of consumptive patients, neuralgia, and the intense lancinating pains from which persons affected with tabes are so often known to suffer. Urethan, according to the author, seems to exhibit the following advantages over other hypnotics: 1, It agrees with the patient. 2, It has absolutely no other effects. 3, The sleep produced by it resembles the normal physiological sleep. Dr. von Jaksch is of opinion that urethan is especially suitable for children, drunkards suffering from delirium, and persons subject to fits of mania. Urethan is the ethyl ether of Carbonic Acid. A German writer gives it as an hypnotic, in doses of from four to fifteen grains, and says it produces a natural sleep and is followed by no complications.

—Johns Hopkins University of Baltimore promises to be a great success, and at present has about 250 students most of whom are pursuing special courses under a system of Fellowships, twenty Fellows can be elected from any department of study (though no more than two can be elected who are pursuing the same specialty), and will receive for one year an income of $500. The services which they render the University are assistance in laboratory work, holding lectures and taking classes. In this way the University secures for itself a body of promising young men, whose influence is of value in producing a spirit of earnest research and serious work. it serves as a good sign of the far-reaching fame of these fellowships, that of the two Fellows in mathematics this year one comes from California and the other from Canada. Johns Hopkins endowed not only a university but also a hospital. The hospital buildings have been in course of erection for almost nine years and when complete will number nearly thirty. Of these eleven are now almost ready for occupancy. In connection with the hospitals, there will be established a medical school, which will probably be opened next year. Dr. William Welsh, formerly of Bellevue Hospital, Professor of Pathology, has spent a year in Europe, examining into the condition of medical schools there, so that the new institution shall have the benefits of the educational wisdom of the world.

—In Germany an apothecary must have a special permit from the Government, which is very difficult to secure. Berlin, with 1,400,000 inhabitants, has only 78 or one to every 20,000 inhabitants. There are drug stores where miscellaneous articles are for sale, but no prescriptions can be prepared on pain of heavy fines. Every precaution is taken to secure safety and first-class medicaments. Poisonous articles are only given on the stamped recommendation of a physician, and the poison has to be kept in a special room. There are Government inspectors who at various times, and without previous notice, visit the apothecaries and examine their stock. If stale or valueless medicaments are found, a reprimand follows, and repetition of the offence costs the apothecary his concession. The prices are regulated by law, allowance being made for the great waste entailed by the necessity of throwing away old and getting fresh supplies.

—A Western writer says balsam copaiba applied freely over the parts is a specific for burns and frozen limbs.

—Prof. Parvin says, "a nail brush should be as constant an attendant upon a doctor as a Bible is upon a minister."

—In chronic catarrh of the bladder, Prof. Bartholow considers eucalyptol as one of the most effective remedies.

—Dr. Fehling, of Stuttgart, the inventor of the well-known test for sugar in urine, died on July 1, in his 73d year.

—It has been found that the adonis cupiniana may readily take the place of the adonis vernalis as a cardiac roborant, its action being similar.

—The next meeting of the American Public Health Association will be held in Washington, D. C., December 8th to 11th, 1885. A most interesting session is anticipated.

—Chronic coughs of obscure origin may frequently be found due to collections of impacted wax in one or both ears, and will be relieved by its removal.

—Consumption is often inherited simply because the heir has used old mattresses, woolen chairs, sofas, carpet, etc., containing disease germs handed down with the personal estate.

—Mr. Lawson Tait states that the administration of ether has special risks for two classes of patients: Those suffering from damaged kidneys, and those prone to bronchitis.

—The New York Post-Graduate Medical School has thoroughly equipped its hospital and various departments and commenced its regular session September 12th, with a large class.

—Dr. Max Busch states that on contracting a muscle by electricity its temperature will rise and be shown by any small surface thermometer, if the person is living; if it does not rise, the person is dead.

—Dr. Strong, Chief-of-Staff, W. I. Hospital, reports 522 patients treated during the month of September. Mortality, 3.83 per cent. Three thousand and seventy-nine patients have been treated since January 1st.

—A lady physician has been appointed an inspector by the Board of Health, and her work is declared to be so superior that it is a question whether the in-door inspection is not essentially the work of women physicians!

—A Spanish writer recommends in gonorrhœa an injection composed of one grain of salicylic acid and twenty-five grains of citric acid to eight ounces of water. The injection used three or four times a day effectually destroys the gonococci.

—Dr. William O. Shakespeare, of Philadelphia, has recently sailed for Europe as United States Commissioner, to investigate the cause and treatment of cholera in the various localities in which it has prevailed during the past epidemic.

—Vital statistics lately published show that in Germany the average life of men has increased during the last thirty years from 41.9 to 43.9 years, or 5 per cent. In women the increase is given at 8 per cent., the advance being from 41.9 to 45.2.

—Dr. Crichton Browne says that the men of to-day eat bread, "not in the sweat of their faces, but in the fever of their brains." Apoplexy, neuro-cephalus and paralysis are, he says, carrying off an increased number of victims every year. In England during the five years, 1861-5, they caused 105,189 deaths, and in 1876-80 the number had increased to 145,503.

—Over 400 physicians answered an advertisement of a club of 4,800 in Germany to attend them for $375 per annum, and six were selected. It would seem that the profession of medicine was at a low ebb in that country and that shoemaking might pay better!

—Binz found that coffee was an absolute antidote to alcohol, and that dogs saturated with caffeine could hardly be intoxicated with alcohol. So you would use coffee or caffeine, and you would recover your patient within the short space of twenty-four hours.

—Albumen in the urine is stated to be invariably present in cases of strangulated hernia in sufficient quantity sometimes to cause death independently of the rupture. Nothnagel attributes this to diminished intravascular pressure, due to the presence of the hernia.

—The profession will learn with pleasure that the President has declined to accept the resignation of Dr. Hamilton, Surgeon General of the Marine Hospital Service, the more especially as it is a proof that the office is to be entirely disconnected from politics.

—The Middletown Asylum for Insane treated 486 patients during the last year, of which 66 were discharged recovered. The death-rate was 5.5 per cent. There are now 355 patients in the institution. New day-rooms and dormitories are now being built which will accommodate 50 patients.

—In Spain the superstitious ignorance of the populace has antagonized the efforts of sanitarians in their behalf at a cost of 80,000 lives. There are cases on record of most terrible brutality to physicians, and many of absolute murder. It does not appear from reports that our more civilized Canadian neighbors are much better off

—The Nosode treatment receives new impetus from the experiment of Professor Cantani, the bacillus tuberculosis being killed through the inhalation by the patient of the bacterium termo, which was found to be a harmless microbe to animals. Whether this result can be accomplished by means of the millionth attenuation remains to be seen.

—Dr. O. G. Darling, of Brooklyn, in the *Ther. Gaz.*, claims that muriate of ammonia in half drachm doses, every half hour, if necessary, until three or four doses have been taken, is a specific for facial neuralgia. He is in the habit of continuing the remedy in smaller doses, say ten grains, three or four times a day for a day or two after the neuralgia subsides. It is also valuable for toothache.

—One would suppose, in fear of the fearful ravages of small-pox in Montreal, that the whole people would cordially endorse the recent ordinance of the Board of Health making vaccination compulsory. On the contrary, the publication of the ordinance was the occasion of a visit in which the health officer, Dr. Laberge was stoned, and his house set on fire The riot was only quieted by a prompt display of military force.

—The unnatural golden hair which may be seen upon many a brunette at present is the result of the application of peroxide of hydrogen, an agent of great therapeutic power. We have seen cases of eczema from its use, and as it has a wonderful, well-known effect upon the process of suppuration, it must also influence the healthy action of organs and tissues. Let the physician suspect every such case, and govern his investigations accordingly, and he will be surprised at the result.